

Nama : Ayu Hanifah

NIM : 28723002

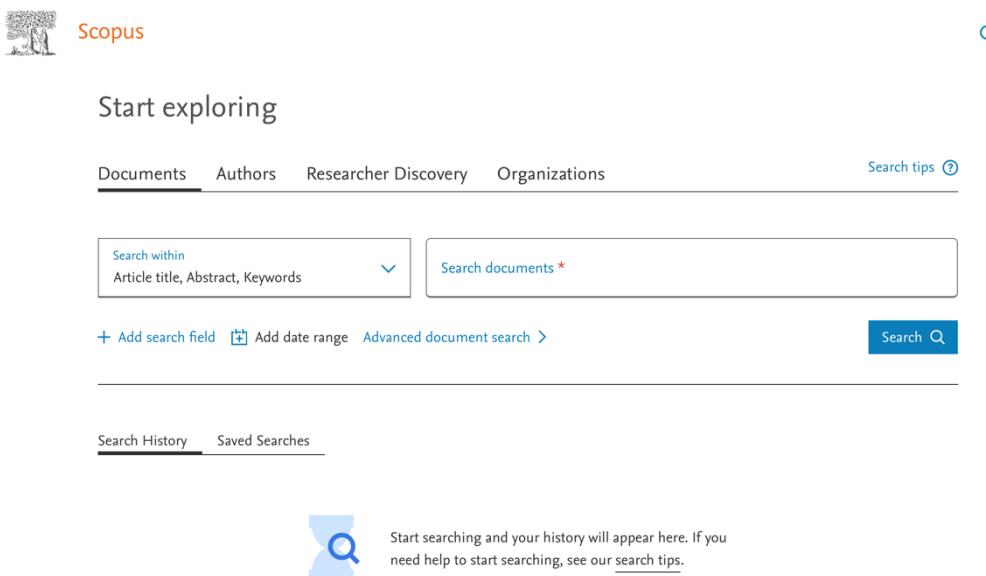
Mata Kuliah : Teknik Penulisan Jurnal Ilmiah

1. Tuliskan empat layanan pengindeks jurnal dan cakupan bidang ilmu yang dilayaniinya.

Sertakan pula screenshot dan alamat website yang dapat ditelusuri dalam sekali klik!

**Jawab :**

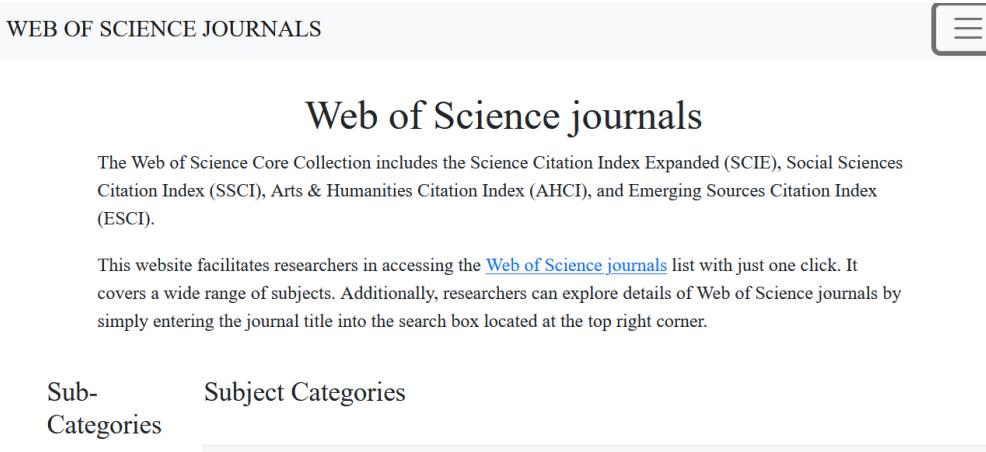
- 1) Scopus (<https://www.scopus.com>)



The screenshot shows the Scopus homepage. At the top, there is a logo and a search bar with a magnifying glass icon. Below the search bar, the text "Start exploring" is displayed. A horizontal menu bar includes "Documents", "Authors", "Researcher Discovery", "Organizations", and "Search tips". Underneath the menu, there is a search interface with a dropdown menu set to "Article title, Abstract, Keywords" and a main search input field labeled "Search documents \*". Below the search fields are buttons for "Add search field", "Add date range", and "Advanced document search". To the right of the search bar is a blue "Search" button with a magnifying glass icon. At the bottom of the page, there are links for "Search History" and "Saved Searches".

Cakupan bidang Scopus : *agriculture, economics, education, engineering, health, mathematics natural science, dan religion*

- 2) Web of Science ([https://wosjournal.com/#google\\_vignette](https://wosjournal.com/#google_vignette))



The screenshot shows the "Web of Science journals" homepage. At the top, there is a header with the text "WEB OF SCIENCE JOURNALS" and a three-line menu icon. Below the header, the title "Web of Science journals" is centered. A descriptive text states: "The Web of Science Core Collection includes the Science Citation Index Expanded (SCIE), Social Sciences Citation Index (SSCI), Arts & Humanities Citation Index (AHCI), and Emerging Sources Citation Index (ESCI)." Further down, another text block says: "This website facilitates researchers in accessing the [Web of Science journals](#) list with just one click. It covers a wide range of subjects. Additionally, researchers can explore details of Web of Science journals by simply entering the journal title into the search box located at the top right corner." At the very bottom, there is a section titled "Sub-Categories" with a "Subject Categories" link.

Cakupan bidang Web of Science : *science* (*Science Citation Index Expanded*), *social* (*Social Sciences Citation Index*), *art & humanities* (*Arts & Humanities Citation Index*), dan *emerging source* (*Emerging Sources Citation Index*).

3) Directory of Open Access Journals (<https://doaj.org/apply/guide/>)



The image shows the DOAJ website header. It features the DOAJ logo with a red square icon and the text "DOAJ". To the right are three dropdown menus: "SUPPORT", "APPLY", and "SEARCH". Below the header, there is a button labeled "APPLY".

## Guide to applying

Before you start the application process, you will be asked to log in or register. You can save your progress and review all your answers before you submit them. To help you, a [PDF list of the questions](#) is available for download.

### Basic criteria for inclusion

#### The type of journal that can apply

Open access journals published in any language may apply. Journals should adhere to the [Principles of Transparency and Best Practice in Scholarly Publishing](#).

- The journal must be actively publishing scholarly research
  - Any research subject area
  - Publish at least five research articles per year
  - Primary target audience of researchers or practitioners

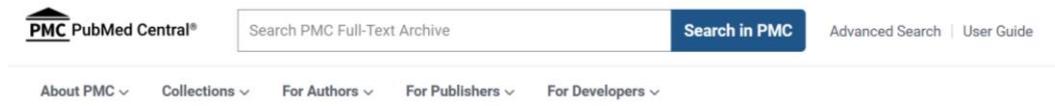
#### JUMP TO:

- [Basic criteria for inclusion](#)
- [Additional criteria for some journal types](#)
- [The application process](#)
- [If your application is rejected](#)
- [Appeals](#)
- [In other languages](#)
- [Version history](#)



Cakupan bidang Directory of Open Access Journals : semua bidang penelitian dengan syarat *open access*. Contohnya adalah *art and humanities*, *clinical case report*, *conference*, *data journal*, *overlay journal*, *student-run journal*, dan lain-lain.

4) PubMed Central (<https://www.ncbi.nlm.nih.gov/pmc/pub/journalselect/>)



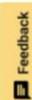
The image shows the PubMed Central homepage. At the top, there is a navigation bar with links for "About PMC", "Collections", "For Authors", "For Publishers", and "For Developers". In the center, there is a search bar with the placeholder "Search PMC Full-Text Archive" and a "Search in PMC" button. To the right of the search bar, there are links for "Advanced Search" and "User Guide".

## Journal Selection for PMC

The National Library of Medicine (NLM) decides whether the scientific and editorial character and quality of a journal merit its inclusion in PMC. In making this decision NLM considers the suitability of the journal for the NLM collection (based on the criteria in the [Collection Development Guidelines](#)), as well as the recommendations of external, expert consultants. The current [scientific and editorial quality review process](#) for journals that apply to participate in PMC has been in place since November 2014.

The consultants include scientists (i.e., Ph.D.- or M.D.-level researchers and physicians) and medical librarians. At least two consultants, usually one scientist and one librarian, review each journal. The consultants generally review articles from the last two years of journal content and evaluate them primarily based on scientific and editorial quality. Their recommendations are taken into consideration by NLM in reaching a final decision on selecting a title for inclusion in PMC.

Journals that already are fully indexed for MEDLINE generally will not require further scientific review for PMC.



Back to Top

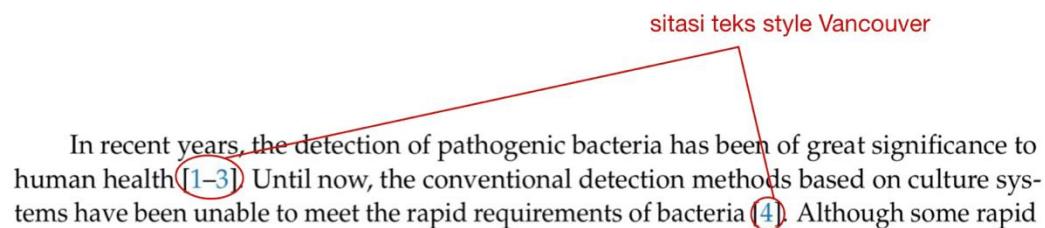
Cakupan bidang PubMed Central : *human research*, *systematic reviews*, *case reports*, *clinical trials*, *animal studies*, *biomedical and life sciences*.

2. Jelaskan apa yang dimaksud dengan sitasi, metrik, dan kuartil untuk jurnal. Berikan ilustrasi dengan screenshot dari masing-masing istilah tersebut dengan alamat website yang dapat ditelusuri dengan sekali klik!

**Jawab:**

Sitasi merupakan suatu cara untuk memberi sebuah informasi kepada pembaca mengenai sumber rujukan yang diambil dalam pembuatan sebuah karya tulis. Sumber rujukan yang digunakan dalam sitasi biasanya adalah karya ilmiah akademik yang berkaitan dengan topik karya tulis. Sitasi tidak hanya terdapat pada bagian akhir karya tulis, tetapi juga pada bagian teks sebagai ‘sitasi-teks’. Cara penulisan sitasi dapat dibagi dalam beberapa *style*, seperti: American Psychological Association (APA), Chicago, Havard, Institute for Electrical and Electronics Engineers (IEEE), Vancouver, dan lain-lain. Berikut adalah contoh sitasi dalam *style* Vancouver dan APA.

sitasi teks style Vancouver



In recent years, the detection of pathogenic bacteria has been of great significance to human health [1–3]. Until now, the conventional detection methods based on culture systems have been unable to meet the rapid requirements of bacteria [4]. Although some rapid

**Contoh sitasi style Vancouver**

1. Xu, Y.; Hassan, M.M.; Zhu, A.; Li, H.; Chen, Q. Dual-mode of magnetic assisted Au@Ag SERS tags and cationic conjugated UCNPs for qualitative and quantitative analysis of multiple foodborne pathogens. *Sens. Actuators B Chem.* **2021**, *344*, 130305. [[CrossRef](#)]
2. Li, D.; Kumari, B.; Makabenta, J.M.; Gupta, A.; Rotello, V. Effective detection of bacteria using metal nanoclusters. *Nanoscale* **2019**, *11*, 22172–22181. [[CrossRef](#)]
3. Xu, Y.; Hassan, M.M.; Sharma, A.S.; Li, H.; Chen, Q. Recent advancement in nano-optical strategies for detection of pathogenic bacteria and their metabolites in food safety. *Crit. Rev. Food Sci. Nutr.* **2021**, *1*–19. [[CrossRef](#)]
4. You, S.; Luo, K.; Jung, J.; Jeong, K.; Lee, E.; Oh, M.; Kim, Y. Gold nanoparticle-coated starch magnetic beads for the separation, concentration, and SERS-based detection of E. Coli O157:H7. *ACS Appl. Mater. Inter.* **2020**, *12*, 18292–18300. [[CrossRef](#)]

Sumber : <https://doi.org/10.3390/ijms23137340>

situs teks style APA

influenced by the presence of significant number of surface atoms and by the quantum confinement effect of the electronic states and this influences the property of nanomaterials as compared to their bulk phases. The properties of matter within this scale are significantly different from individual atoms or molecules and from bulk materials (Dong-Hwang and Szu-Han, 2003). These inorganic and organic nanomaterials have been synthesized by a variety of physical and chemical methods like chemical reduction methods (Zaheer et al., 2010; Ahmad et al., 2010; Chou and Ren, 2000; Nersisyan et al., 2003; Nickel et al., 2000; Sun and Xia, 2002; Sileikaite et al., 2006), thermal methods (Sun and Luo, 2005), irradiation methods (Shao and Yao, 2006; Li et al., 2006) or methods using laser ablation (Tsuhi et al., 2002). Among these methods

Contoh sitasi style APA

- Ahmad, N., Malik, M.A., Al-Nowaiser, F.M., Khan, Z., 2010. A kinetic study of silver nanoparticles formation from paracetamol and silver(I) in aqueous and micellar media. *Colloid. Surf. B: Biointerf.* 78, 109–114.
- Agnoli, F., Zhou, W.L., Connor, C.J.O., 2001. Synthesis of cubic antiferromagnetic  $KMnF_3$  nanoparticles using reverse micelles and their self-assembly. *Adv. Mater.* 13, 1697–1699.
- Alejandra, L., Reinhard, S., 2006. Synthesis of manganite perovskite  $Ca_{0.5}Sr_{0.5}MnO_3$  nanoparticles in w/o-microemulsion. *Mater. Res. Bull.* 41, 333–339.

Sumber: <https://doi.org/10.1016/j.arabjc.2010.09.027>

Metrik jurnal merupakan sebuah metode kuantitatif yang digunakan untuk mengukur pengaruh dari jurnal akademik. Metrik jurnal akan menjadi sebuah acuan bagi para peneliti atau akademisis untuk membuat keputusan mengenai strategi publikasi. Cakupan dari metrik jurnal pada umumnya adalah sebagai berikut.

- a) *Impact factor* : pengukuran mengenai rata-rata sitasi pada *publisher* jurnal.
- b) *Cite score* : pengukuran mengenai rata-rata sitasi pada satu jurnal tertentu.
- c) *Journal citation indicator* : perbandingan *citation impact* pada berbagai bidang jurnal.
- d) *Acceptance rate* : persentase dari draft jurnal yang diterima.
- e) *Submission to final decision time* : waktu rata-rata sejak draft jurnal diterima hingga keputusan akhir.
- f) *Acceptance to publication time* : waktu yang dibutuhkan hingga draft jurnal berhasil dilakukan publikasi.

Metrik dapat menjadi evaluasi pembanding antara *publisher* jurnal. Berikut adalah contoh metrik dari *publisher Taylor&Francis*.

Journal metrics		
 Usage <ul style="list-style-type: none"><li>• 255K annual downloads/views</li></ul>	 Citations metrics <ul style="list-style-type: none"><li>• 8.302 (2019) Impact Factor</li><li>• Q1 (2019) Impact Factor Best Quartile</li><li>• 10.404 (2019) 5 year IF</li><li>• 13.3 (2019) CiteScore</li><li>• 2.591 (2019) SNIP</li><li>• 2.074 (2019) SJR</li></ul>	 Speed/acceptance <ul style="list-style-type: none"><li>• 13 days avg. from submission to first decision</li><li>• 47 days avg. from submission to first post-review decision</li><li>• 18 days avg. from acceptance to online publication</li><li>• 27% acceptance rate</li></ul>

Sumber : <https://authorservices.taylorandfrancis.com/publishing-your-research/choosing-a-journal/journal-metrics/>

Kuartil merupakan suatu peringkat yang akan membagi jurnal pada empat kelompok, berdasarkan pengaruh atau peformanya. Pada umumnya, faktor yang memperengaruhi kuartil adalah *impact factor* atau *citation rate*. Kuartil jurnal terbagi dalam empat kelompok, yaitu sebagai berikut.

- a) Q1: jurnal dengan peringkat tertinggi dengan meraih peringkat 25% teratas
- b) Q2: jurnal dengan peringkat tertinggi kedua, dengan persentase 25% hingga 50%
- c) Q3: jurnal dengan persentase 50% hingga 75%
- d) Q4: jurnal dengan peringkat terendah, dengan persentase 75% terbawah

Kuartil pada jurnal biasa digunakan oleh para peneliti untuk menentukan jurnal mana yang akan menjadi target dalam publikasi. Selain itu, para peneliti dapat memetakan kualitas akademik dari penelitian yang telah dilakukan. Berikut adalah contoh kuartil Q1 pada jurnal.

	Title	Type	↓ SJR	H index	Total Docs. (2022)	Total Docs. (3years)	Total Refs. (2022)	Total Cites (3years)	Citable Docs. (3years)	Cites / Doc. (2years)	Ref. / Doc. (2022)	
1	Ca-A Cancer Journal for Clinicians	journal	86.091 Q1	198	44	118	4268	30318	85	299.99	97.00	
2	Quarterly Journal of Economics	journal	36.730 Q1	292	36	122	2398	2141	122	14.83	66.61	
3	Nature Reviews Molecular Cell Biology	journal	34.201 Q1	485	121	328	10804	13331	156	35.47	89.29	

Sumber : <https://www.scimagojr.com>

3. Tuliskan jenis publikasi dari empat sumber berbeda dengan screenshot dari masing-masing sumber serta alamat web yang dapat ditelusuri dengan sekali klik!

**Jawab:**

- a) Jurnal

Jurnal merupakan suatu publikasi penelitian penelitian yang ditulis oleh seorang atau beberapa peneliti, dan telah melalui proses *review* oleh peneliti lainnya atau seorang ahli. Contoh jurnal adalah sebagai berikut.

 International Journal of  
Molecular Sciences



*Article*

**In Situ Collection and Rapid Detection of Pathogenic Bacteria Using a Flexible SERS Platform Combined with a Portable Raman Spectrometer**

Huimin Zhao, Dawei Zheng, Huiqin Wang, Taifeng Lin, Wei Liu, Xiaoli Wang, Wenjing Lu, Mengjia Liu, Wenbo Liu, Yumiao Zhang, Mengdong Liu and Ping Zhang \*

Faculty of Environment and Life, Beijing International Science and Technology Cooperation Base of Antivirus Drug, Beijing University of Technology, Beijing 100124, China; zhaohm@mails.bjut.edu.cn (H.Z.); zdv@bjut.edu.cn (D.Z.); wanghuiqin@bjut.edu.cn (H.W.); lintaifeng@bjut.edu.cn (T.L.); 13581830343@139.com (W.L.); wangxiali@bjut.edu.cn (X.W.); L2384130472@163.com (W.L.); liumengjia86@163.com (M.L.); liuwenbo2021@163.com (W.L.); zhangyumiao@mails.bjut.edu.cn (Y.Z.); 13522510559@163.com (M.L.)

\* Correspondence: zplife@bjut.edu.cn

**Abstract:** This study aims to develop a simple, sensitive, low-cost, environmentally friendly and flexible surface-enhanced Raman scattering (SERS) platform, combined with a portable Raman spectrometer, for the rapid and on-site SERS detection of bacteria. Commercial tobacco packaging paper (TPP) with little background interference was used as a loading medium that effectively adsorbed Au nanoparticles and provided sufficient "hot spots". This Au-tobacco packaging paper (Au-TPP) substrate used as a flexible SERS platform can maximize sample collection by wiping irregular surfaces, and was successfully applied to the on-site and rapid detection of pathogenic bacteria. Raman fingerprints of pathogenic bacteria can be obtained by SERS detection of spiked pork using wipeable Au-TPP, which verifies its value in practical applications. The results collected by SERS were further verified by polymerase chain reaction (PCR) results. It showed several advantages in on-site SERS detection, including accurate discrimination, simple preparation, easy operation, good sensitivity, accuracy and reproducibility. This study indicates that the established flexible SERS platform has good practical applications in pathogenic bacterial identification and other rapid detections.

**Keywords:** flexible SERS platform; pathogenic bacteria; rapid detection; in situ test



Citation: Zhao, H.; Zheng, D.; Wang, H.; Lin, T.; Liu, W.; Wang, X.; Lu, W.; Liu, M.; Liu, W.; Zhang, Y.; et al. In Situ Collection and Rapid Detection of Pathogenic Bacteria Using a Flexible SERS Platform Combined with a Portable Raman Spectrometer. *Int. J. Mol. Sci.* **2022**, *23*, 7340. <https://doi.org/10.3390/ijms23137340>

Academic Editor: Andreas

Sumber : <https://doi.org/10.3390/ijms23137340>

- b) *Proceeding*

*Proceeding* merupakan publikasi yang dapat menampilkan sebagian dan simpulan dari penelitian yang telah dilakukan. Publikasi ini akan dilakukan seminar oleh para penulis, melalui kegiatan *conference*. Berikut adalah contoh *proceeding*.

# SERS Prediction with Deep Learning

Zixuan Ma, Yanmeng Hu, Remmeng Cao, Mengmeng Li, and Rushan Chen  
Departement of Communication Engineering  
Nanjing University of Science and Technology  
Nanjing, China  
email: limengmeng@njust.edu.cn

**Abstract**—Surface Enhanced Raman Scattering (SERS) has become a spectroscopic detection technique widely used in many fields. This paper proposes a SERS electric field distribution prediction model based on deep learning, the average relative norm error of the test set is 3.6%. It takes about 3 minutes to perform an FDTD simulation for an Au nanosphere dimer on a high-performance server, while using the deep learning model on an ordinary PC only takes less than 0.003 seconds, which can be used as a kind of fast calculation tool in the optimization algorithm.

**Keywords**—SERS, deep learning, Au nanosphere dimer

## I. INTRODUCTION

Surface Enhanced Raman Scattering (SERS) has aroused great research interest due to its wide applications in surface science, applied optics, materials science, environmental science, and biomedicine[1]. The electromagnetic (EM) enhancement factor, which mainly comes from plasmonic resonance and plasmonic coupling, attributing to a larger part of high enhancement factor (EF) of SERS[2]. Plasmonic resonance relies on local surface plasmon resonance (LSPR) to increase the Raman signal of molecules in the local optical field by many orders of magnitude. Plasmonic coupling is the so-called "hot spot" effect, which mainly comes from the tips or gaps of nanoparticles. This electric field enhancement can reach to  $10^{13}$ – $10^{14}$  orders of magnitude.

optimization problems can significantly improve optimization efficiency. However, training a deep learning model requires a lot of simulation data.

### A. Generate Data Set

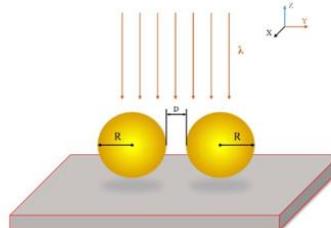


Fig. 1. Au nanosphere dimer. Among them, the wavelength  $\lambda$  of the incident electromagnetic wave varies from 400 nm to 900 nm, the step length is 25 nm, the polarization direction is the positive direction of the x-axis, and the incident direction is the negative direction of the z-axis. The radius R of the two spheres varies from 10 nm to 40 nm, and the step length is 5 nm. The distance D between the two balls can vary from 1 nm to 10 nm, and the step length is 1 nm.

Sumber : <https://ieeexplore.ieee.org/document/9343629>

## c) Paten

Patent merupakan suatu publikasi yang ditujukan untuk mendapatkan hak kepemilikan dari produk yang inovatif. Contoh dari publikasi paten adalah sebagai berikut.



(12) United States Patent  
Delest et al.

(10) Patent No.: US 6,875,456 B2  
(45) Date of Patent: Apr. 5, 2005

### (54) PROTEIN HYDROLYSATES

### FOREIGN PATENT DOCUMENTS

(75) Inventors: **Veronique Delest, Antony (FR), Lullo Edens, JI, Rotterdam (NL), Jan Gerrit Kortes, HV Leusden (NL), Thierry Jean-Bernard Naeye, Toufflers (FR)**

EP 0274946 7/1988

EP 0495391 7/1992

EP 0799577 10/1997

EP 0834573 4/1998

GB 1547832 6/1979

WO WO 93/0030 11/1993

WO WO 98/14599 4/1998

WO WO 98/27827 7/1998

WO WO 98/27828 7/1998

(73) Assignee: **DSM IP Assets B.V., Het Overloon (NL)**

WO WO 98/27828 7/1998

(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

WO WO 98/27828 7/1998

(21) Appl. No.: **10/399,485**

WO WO 98/27828 7/1998

(22) PCT Filed: **Oct. 17, 2001**

WO WO 98/27828 7/1998

(86) PCT No.: **PCT/EP01/12104**

WO WO 98/27828 7/1998

§ 371 (c)(1), (2), (4) Date: **Oct. 16, 2003**

WO WO 98/27828 7/1998

(87) PCT Pub. No.: **WO02/32232**

WO WO 98/27828 7/1998

PCT Pub. Date: **Apr. 25, 2002**

WO WO 98/27828 7/1998

(65) Prior Publication Data

WO WO 98/27828 7/1998

US 2004/0067279 A1 Apr. 8, 2004

WO WO 98/27828 7/1998

(30) Foreign Application Priority Data

WO WO 98/27828 7/1998

Oct. 19, 2000 (EP) ..... PCT/EP00/10345

WO WO 98/27828 7/1998

(51) Int. Cl. <sup>7</sup> ..... **A23J 3/34; C12P 21/06**

WO WO 98/27828 7/1998

(52) U.S. Cl. ..... **426/63; 426/56; 426/42;**

**426/46; 426/52; 426/56; 435/68.1**

(58) Field of Search ..... **435/68.1; 426/34;**

**426/42; 46, 52, 56, 63, 574, 582, 592, 656,**

WO WO 98/27828 7/1998

d) *Chapter book*

*Chapter book* merupakan publikasi yang berisikan teori mengenai objek atau bidang tertentu yang spesifik. *Chapter book* ditulis oleh kumpulan para ahli yang setiap babnya berbeda, sesuai dengan bidang yang telah diampuh oleh para ahli tersebut. Pada umumnya, sitasi akan dicantumkan pada teks dan akhir bab tersebut. Contoh *chapter book* adalah sebagai berikut.

## Chapter 1

---

# Introduction, Basic Theory and Principles

### 1.1 INTRODUCTION

The main spectroscopies employed to detect vibrations in molecules are based on the processes of infrared absorption and Raman scattering. They are widely used to provide information on chemical structures and physical forms, to identify substances from the characteristic spectral patterns ('fingerprinting') and to determine quantitatively or semiquantitatively the amount of a substance in a sample. Samples can be examined in a whole range of physical states, for example, as solids, liquids, vapours, hot and cold, in bulk, as microscopic particles or as surface layers. The techniques are very wide ranging and provide solutions to a host of interesting and challenging analytical problems. Raman scattering is less widely used than infrared absorption, largely due to problems with sample degradation and fluorescence. However, recent advances in instrument technology have simplified the equipment and reduced the problems substantially. These advances, together with the ability of Raman spectroscopy to examine aqueous solutions, samples inside glass containers and samples without any preparation, have led to a rapid growth in the application of the technique.

Sumber : <https://doi.org/10.1002/9781119440598.ch1>

4. Tuliskan struktur artikel ilmiah dan kriteria dari masing-masing bagian seperti jumlah kata, paragraf, ada tidaknya gambar, referensi, dan lain-lain. Sajikan dalam bentuk tabel dan alamat website yang dapat diteusuri dengan sekali klik!

**Jawab:**

Struktur	Pengertian	Jumlah Kata
Judul	Kalimat yang mencakup keseluruhan isi jurnal.	10 hingga 15 kata
<i>Abstract</i>	Penjelasan mengenai keseluruhan penelitian secara singkat dan jelas. Pada bagian abstrak tidak terdapat sitasi teks, tetapi dapat terdiri dari <i>graphical abstract</i> , yaitu gambar yang mencakup keseluruhan penelitian.	Maksimal 150 hingga 300 kata
<i>Introduction</i>	Pemaparan alasan penelitian dilakukan, <i>research gap</i> , dan <i>novelty</i> . Terdapat sitasi teks, dan beberapa jurnal memaparkan gambar untuk memperjelas <i>introduction</i> .	Maksimal 400 kata dalam 1 hingga 4 paragraf
<i>Materials and Methods</i>	Penjelaskan secara jelas menyenai tahapan penelitian maupun pengujian, disertai rincian alat dan bahan yang digunakan. Sitasi teks dicantumkan sebagai acuan dalam pelaksanaan penelitian. Gambar juga dapat ditambahkan untuk memperjelas bagaimana metode yang dilakukan, jika metode yang digunakan sulit untuk dijelaskan dengan paragraph.	Maksimal 700 hingga 800 kata dalam 6 hingga 9 paragraf

<b>Struktur</b>	<b>Pengertian</b>	<b>Jumlah Kata</b>
<i>Result and Discussion</i>	Pembahasan mengenai hasil dari penelitian secara rinci. Gambar maupun tabel yang berkaitan dengan penelitian dapat dipaparkan pada bagian ini. Bagian ini biasanya memaparkan hasil penelitian yang telah dilakukan peneliti lain sebagai pembanding.	Maksimal 1000 hingga 1500 kata dalam 4 hingga 10 paragraf
<i>Conclusion</i>	Pemaparan mengenai simpulan dari hasil, kekurangan, dan peluang <i>future research</i> dari penelitian yang telah dilakukan. Tidak ada gambar, tabel, maupun sitasi teks pada bagian ini.	Maksimal 900 hingga 1000 kata
<i>Acknowledge</i>	Penyataan untuk melakukan apresiasi pada siapapun yang berpatisipasi dalam penelitian, seperti pemberi biaya.	Maksimal 100 hingga 200 kata
<i>Reference</i>	Berisi seluruh sitasi dari sumber rujukan yang digunakan pada jurnal.	Beberapa <i>publisher</i> , membatasi <i>reference</i> dengan jumlah maksimal 30

Sumber: <https://doi.org/10.5935%2Fabc.20140019> ; <https://doi.org/10.1111/j.1442-2042.2009.02278.x> ; <https://axial.acs.org/publishing/new-chemrxiv-policy-on-the-use-of-ai-tools> ; <https://dissertation.laerd.com/write-your-dissertation-acknowledgements-in-10-minutes.php> ;  
<https://www.tandfonline.com/action/authorSubmission?show=instructions&journalCode=ldrt20#formatting-and-templates>

5. Tuliskan kebijakan dari setidaknya empat penerbit mengenai kebijakan penggunaan AI dalam menulis artikel ilmiah yang dilengkapi dengan screenshot dari masing-masing kebijakan dan website yang dapat ditelusuri dengan sekali klik!

**Jawab :**

a) Elsevier

AI hanya boleh digunakan untuk keperluan perbaikan bahasa, gaya bahasa, dan keperluan tulisan lainnya dalam penggerjaan karya tulis. Penulis harus berhati-hati dalam menggunakan Ai, karena dapat menyebabkan kesalahan arti atau bias. Dalam penggunaanya, penulis harus menyatakan penggunaan AI dalam karya tulisnya pada bagian tertentu. Pernyataan ini akan menghilangkan kesalahpahaman antara penulis, pembaca, dan *reviewer*. Selain itu, AI tidak boleh dimasukkan sebagai penulis. Hal ini disebabkan oleh karya tulis harus bersifat asli dan harus dapat dipertanggungjawabkan oleh penulis. AI juga tidak boleh digunakan untuk membuat gambar, kecuali meningkatkan pencahayaan, kontras, atau keseimbangan warna jika diperlukan.

[Ethics](#)    [Duties of the Publisher](#)    [Duties of Editors](#)    [Duties of Reviewers](#)    [Duties of Authors](#)    [References](#)

### The use of generative AI and AI-assisted technologies in scientific writing

This policy has been triggered by the rise of generative AI and AI-assisted technologies which are expected to increasingly be used by content creators. The policy aims to provide greater transparency and guidance to authors, readers, reviewers, editors and contributors. Elsevier will monitor this development and will adjust or refine this policy when appropriate. Please note the policy only refers to the writing process, and not to the use of AI tools to analyse and draw insights from data as part of the research process.

Where authors use generative AI and AI-assisted technologies in the writing process, these technologies should only be used to improve readability and language of the work. Applying the technology should be done with human oversight and control and authors should carefully review and edit the result, because AI can generate authoritative-sounding output that can be incorrect, incomplete or biased. The authors are ultimately responsible and accountable for the contents of the work.

Authors should disclose in their manuscript the use of AI and AI-assisted technologies and a statement will appear in the published work. Declaring the use of these technologies supports transparency and trust between authors, readers, reviewers, editors and contributors and facilitates compliance with the terms of use of the relevant tool or technology.

Authors should not list AI and AI-assisted technologies as an author or co-author, nor cite AI as an author. Authorship implies responsibilities and tasks that can only be attributed to and performed by humans. Each (co-) author is accountable for ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved and authorship requires the ability to approve the final version of the work and agree to its submission. Authors are also responsible for ensuring that the work is original, that the stated authors qualify for authorship, and the work does not infringe third party rights, and should familiarize themselves with our [Ethics in Publishing policy](#) before they submit.

Sumber : <https://www.elsevier.com/about/policies-and-standards/publishing-ethics#>

b) Taylor&Francis

Penulis harus bertanggung jawab terhadap seluruh persyaratan dan isi karya tulis. Pertanggung jawaban yang tidak dapat dilakukan oleh AI ini, melarbelakangi pelarangan mencantumkan AI sebagai penulis. AI dapat digunakan dalam penulisan karya ilmiah, namun penulis harus menyatakan secara jelas kapan AI digunakan.

The screenshot shows a newsroom page from Taylor & Francis. At the top, there's a logo for Taylor & Francis, an Informa business, and a search bar with the placeholder "Search press releases on Newsroom". Below the search bar is a button labeled "Search". Underneath the header, there's a sub-header "Taylor & Francis news" and the date "17th February 2023". The main title of the article is "Taylor & Francis Clarifies the Responsible use of AI Tools in Academic Content Creation". The article content discusses the responsible use of AI tools in research and writing, mentioning large language models (LLMs), generative AI, and chatbots like ChatGPT. It reiterates guidance on author accountability and responsibilities regarding AI tool use. The text states that the policy will be iterated as appropriate. A note at the bottom says Taylor & Francis recognizes the increased use of AI tools in academic research and considers such tools as part of the publisher's mission. To the right of the article, there's a section titled "Share this press release" with links to Facebook, LinkedIn, and X (Twitter). Below that is an "Embargo Area" with a link to log in for exclusive access to breaking research news.

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

c) ACS

AI tidak boleh dicantumkan sebagai penulis, karena keseluruhan isi karya tulis adalah tanggung jawab penulis sesungguhnya. Akan tetapi, AI boleh digunakan untuk memeriksa adanya kesalahan penulisan, atau perbaikan teks. Dalam penggunaannya, penulis harus menyatakan secara jelas mengenai kapan dan bagaimana AI digunakan. Pernyataan ini dapat dituliskan pada bagian *materials and method*, akhir dari karya tulis, atau lokasi lain yang sekiranya cocok untuk diberi pernyataan.

ACS ACS Publications C&EN CAS

ACS axial Most Read Calls for Papers All topics ▾

Search articles, journals & authors

Publishing

## New ChemRxiv Policy on the Use of AI Tools

Andrew Clinton Jun 9, 2023 • 2 min read

More Axial articles on Publishing

- ChatGPT in Research and Education: Continuing the Conversation** May 22, 2023 • 6 min read
- AI in Publishing: The Ghost Writer in the Machine** Feb 16, 2023 • 4 min read
- ChemRxiv: From a User's Perspective** Dec 15, 2022 • 2 min read
- ACS Publications' Name Change Policy Advances**

Sign up to Axial newsletter

Sumber : <https://axial.acs.org/publishing/new-chemrxiv-policy-on-the-use-of-ai-tools>

d) Nature

AI *Large Language Models* (LLM) seperti ChatGPT tidak boleh dicantumkan sebagai penulis. Jika menggunakan LLM, maka rincian penggunaan harus dicantumkan pada bagian *methods*. Jika tidak terdapat bagian *methods*, maka rincian dapat menyesuaikan. Gambar tidak boleh menggunakan AI karena tidak dapat dijamin legalitasnya. Akan tetapi, jika gambar tersebut harus merepresentasikan penggunaan AI, maka harus dibuat rinci alasannya dan akan dilakukan *review* khusus.

nature portfolio

View all journals Search Log in

nature > nature portfolio > editorial policies > artificial intelligence (ai)

[Editorial policies](#)  
[Authorship](#)  
[Competing interests](#)  
[Research Ethics](#)  
[Reporting standards and availability of data, materials, code and protocols](#)  
[Image integrity and standards](#)  
[Plagiarism and duplicate publication](#)  
[Corrections, Retractions and Matters Arising](#)  
[Peer Review](#)  
[Confidentiality](#)  
[Acknowledgements](#)  
[Preprints & Conference Proceedings](#)

## Artificial Intelligence (AI)

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

- [AI authorship](#)
- [Generative AI images](#)
- [AI use by peer reviewers](#)

### AI authorship

Large Language Models (LLMs), such as ChatGPT, do not currently satisfy our [authorship](#) criteria. Notably an attribution of authorship carries with it accountability for the work, which cannot be effectively applied to LLMs. Use of an LLM should be properly documented in the Methods section (and if a Methods section is not available, in a suitable alternative part) of the manuscript.

Sumber: <https://www.nature.com/nature-portfolio/editorial-policies/ai>

6. Buat bagian pendahuluan dari suatu artikel ilmiah dengan AI yang dilengkapi dengan referensi. Analisis dan validasi hasilnya dengan membandingkan dengan model *hour glass*. Jelaskan batasan AI yang perlu diperhatikan dan sertakan alamat web ke hasil diskusi dengan AI!

**Jawab :**

Contoh *output introduction* yang dibuat menggunakan AI Co-pilot dari *Microsoft edge* adalah sebagai berikut.

*Surface-enhanced Raman scattering (SERS), a technique derived from Raman spectroscopy, has revolutionized the field of bacteria detection. Unlike conventional methods, SERS offers enhanced sensitivity and surface selectivity, making it an ideal tool for identifying pathogens. When molecules adsorb onto rough metal electrodes, their Raman spectral signals experience significant amplification, leading to improved detection capabilities. This phenomenon, known as Surface Enhanced Raman Spectroscopy, has opened new avenues for precise and rapid bacterial identification [1].*

*SERS's advantages lie in its ability to provide detailed structural information about bacterial samples without the need for labeling or specific receptors. By directly interrogating molecular vibrations, SERS achieves label-free detection, making it versatile and adaptable to various bacterial species. Nanostructured substrates, such as gold nanoparticles, enhance the Raman signal, enabling rapid and sensitive detection. Researchers have harnessed SERS for nucleic acid detection, pathogen identification, and even discrimination between live and dead bacteria [1] [2].*

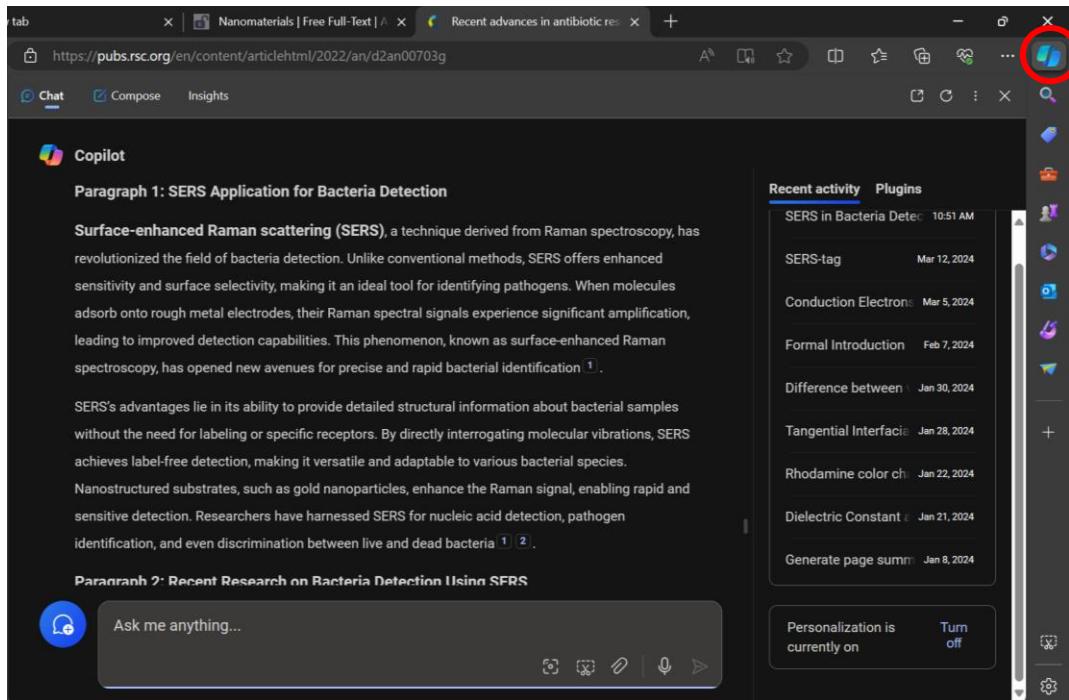
*Recent studies have explored the application of SERS in detecting various bacterial species, with a particular focus on antibiotic-resistant strains. Nanomaterials, including gold and silver nanoparticles, serve as SERS-active substrates for biosensing low concentrations of bacterial cells. These substrates enable label-free detection, providing detailed structural information for the bacterial samples themselves. Researchers have also developed tandem-SERS strategies, integrating separation elements or platforms with SERS sensing. These approaches allow the detection of antibiotic-resistant bacteria in*

*environmental, agri-food, and clinical samples. Notably, the “Big 5” antibiotic-resistant challenges: Methicillin resistant *Staphylococcus aureus* (MRSA), Carbapenem-resistant *Enterobacter* (CRE)/Extended-spectrum Beta-Lactamase (ESBLs), *Mycrobacterium tuberculosis* (TB), Vacomycin-resistant *Enterococcus* (VRE) and *Nisseria gonorrhoeae* (NG), have been the focus of recent SERS research [1][3].*

*Despite significant progress, certain gaps remain in SERS-based bacterial detection. First, achieving real-time detection without extensive sample preparation remains a challenge. Researchers must explore streamlined approaches that minimize separation and enrichment steps. Second, enhancing the specificity of SERS for different bacterial strains is crucial. Tailoring SERS substrates to target specific pathogens can improve accuracy. Third, integrating SERS with chemometrics and machine learning algorithms can enhance data analysis and classification. By addressing these gaps, we can unlock the full potential of SERS for rapid, reliable, and label-free bacterial detection, ultimately benefiting clinical diagnostics and public health [1][2][3].*

### **Co-pilot:**

Co-pilot merupakan AI yang sudah ada pada *Microsoft Edge*, sehingga tidak memiliki alamat *website*. Penggunaan Co-pilot sama seperti ChatGPT yang bersifat sebagai *open chat*. Operator akan memberikan perintah pada kolom percakapan, yang selanjutnya akan dijawab oleh Co-pilot. Co-pilot akan mencantumkan sumber referensi berupa *website* atau *paper* yang digunakan untuk menjawab, pada akhir jawaban. Berikut adalah posisi dan tampilan Co-pilot.



### Analysis output Co-pilot:

Bahasa yang digunakan oleh Co-pilot dalam pembuatan *introduction*, masih kurang baik karena menggunakan kata-kata yang tidak cocok dalam kalimat karya tulis ilmiah. Sebagai contoh pada kalimat pertama, paragraf satu:

“... *derived from Raman spectroscopy has revolutionized the field of bacteria detection.*”

Kata “*revolutionized*” tidak cocok digunakan dalam kalimat, akan lebih baik jika diganti dengan “*developed*”. Kata-kata yang tidak cocok, akan menjadikan paragrafpada karya tulis ilmiah tidak *scientific*. Oleh karena itu, penulis harus membaca dengan rinci setiap kalimat pada bagian *ntroduction* dan memperbaiki kalimat sesuai dengan gaya penulisan.

Sebagian besar kutipan pada paragraf telah sesuai dengan jurnal yang dicantumkan. Akan tetapi, penempatan sitasi teks pada bagian akhir paragraf, akan membuat pembaca kesulitan untuk membedakan antara kalimat yang dibuat oleh Co-pilot, dengan kalimat yang dikutip oleh Co-pilot. Disisi lain, terdapat kekurangan dalam pengutipan. Sebagai contoh, pada kalimat dua paragraf dua:

*“By directly interrogating molecular vibrations, SERS achieves label-free detection, making it versatile ...”*

Kalimat terdsebut atau cara kerja metode *label-free*, tidak terdapat pada sumber rujukan yang tertera. Pernyataan mengenai aplikasi SERS untuk membedakan bakteri hidup dan mati pada kalimat terakhir paragraph dua juga, tidak dilakukan oleh peneliti pada sumber rujukan 1 maupun 2. Aplikasi SERS untuk membedakan bakteri yang hidup dan mati terdapat pada jurnal yang dikutip oleh sumber rujukan 3.

Pada paragraf tiga kalimat terakhir, sumber rujukan yang dinyatakan oleh Co-pilot sebagai fokus riset dalam beberapa tahun terakhir, masih kurang. Dibutuhkan empat atau lebih sumber rujukan dalam waktu lima tahun terakhir yang membahas topik sama, agar dapat dikatakan sebagai fokus riset terbarukan. Selain itu, tidak ada kutipan maupun hasil penelitian dari sumber rujukan 1 yang dikutip oleh paragraph tiga. Namun, paragraph tiga tetap mencantumkan sumber rujukan 1. Pembahasan mengenai *research gap* pada paragraph terakhir masih kurang rinci dan dibahas secara umum. Akan tetapi, alur kalimat dalam paragraf terakhir sangat ringkas dan jelas.

*Introduction* yang dibuat oleh Co-pilot telah mengikuti kaidah *hour glass* karena membahas dari hal yang bersifat umum, menuju hal yang bersifat khusus. Akan tetapi, kesesuaian ini juga dipengaruhi oleh perintah yang diberikan oleh operator.

Berdasarkan hasil *introduction*, maka batasan penggunaan AI yang penting untuk diperhatikan adalah mengenai kesesuaian kalimat dengan sumber rujukan, serta Bahasa yang digunakan. Penulis harus dapat memilah antara kalimat yang bersifat umum dan khusus ketika pembuatan *introduction* agar dapat mengikuti kaidah *hour glass*. Selain itu, akan lebih baik jika *introduction* tidak sepenuhnya dibuat oleh AI agar dapat menambah wawasan penulis, serta dapat mempertanggung jawabkan *introduction* yang telah ditulis.