

UNIVERSITAS GADJAH MADA



Penulisan Artikel Ilmiah di Jumal Internasional

Yusril Yusuf Departemen Fisika, FMIPA UGM



About the Speaker



Academic:

S. Si. 1990 -1995 UGM, Indonesia

M. Si . 1995 -1998 ITB, Indonesia

M. Eng. 2000 -2002, Kyushu University, Japan

D. Eng. 2002 -2005, Kyushu University, Japan

Fellowship:

Post Doctoral 2005 -2007, Kyushu University, Japan

Award:

Glenn H. Brown Prize 2006, ILCS, Colorado USA

https://orcid.org/0000-0001-9104-9333

h-Index: 17 (Scopus), 19 (Google Scholars)

Published Articles:



Physical Review E

Q1 (2020), h-index: 304 (2019), IF: 2.529 (2023)

Applied Physics Letters

Q1 (2019), h-index: 423 (2019), IF: 3.971 (2023)

Materials Science and Engineering C

Q1 (2019), h-index:117 (2019): , IF: 8.457 (2023)

Chemical Physics Letters

Q1 (1999-2012), Q2 (2013-2019), h-index: 229 (2019), IF: 2.719 (2023)

Journal of the Physical Society of Japan

Q1 (1999-2015), Q2 (2016-2019), h-index: 126 (2019), IF: 1.933 (2023)

Japanese Journal of Applied Physics

Q2 (2020), h-index:129 (2020): , IF: 1.491 (2023)

Journal of Asian Ceramic Societies

Q2 (2020), h-index: 33 (2020): , IF: 2.546, (2023)

Biomaterials Research

Q1 (2020), h-index: 24 (2020): , IF: 15.863 (2023)

Materials Today Communications

Q2 (2020), h-index: 25 (2020): , IF: 2.678 (2019)

Contents



- □ Some Definitions
- ☐ Research and Scientific Paper
- □ Scientific Journal Selection
- □ Writing Tips
- Submission Tips
- □ General Tips



International Journal

Definisi umum Jurnal Internasional:

Adalah karya ilmiah yang ditulis sekaligus disebarluaskan secara internasional serta dapat dipertanggungjawabkan, bersifat mendunia, dengan seleksi isi atau konten yang sangat ketat dan bersifat baru. Jurnal internasional diterbitkan secara teratur dalam bahasa Inggris atau bahasa internasional lainnya dan biasanya diterbitkan oleh lembaga akademik atau organisasi non-profit dan memiliki pembaca di seluruh dunia.

International Journal

Kriteria Jurnal internasional (DIKTI):

- 1. Memenuhi **kaidah ilmiah** dan etika keilmuan
- 2. Memiliki ISSN
- 3. Menggunakan **bahasa resmi** PBB (Arab, Inggris, Perancis, Rusia, Spanyol dan Tiongkok), bukan bahasa Indonesia
- 4. Memiliki terbitan versi online
- 5. Dewan Redaksi (*Editorial Board*) adalah pakar di bidangnya paling sedikit berasal dari **4 (empat) negara**
- 6. Artikel ilmiah yang diterbitkan dalam 1 (satu) terbitan paling sedikit penulisnya berasal dari **4 (empat) negara**.
- 7. Terindeks oleh *database* internasional bereputasi: *Web of Science, Scopus, Microsoft Academic Search,* dan/atau laman sesuai dengan pertimbangan tim pakar Ditjen Dikti.

International Journal

- Jurnal internasional bereputasi adalah jurnal yang memenuhi kriteria jurnal internasional di atas dengan kriteria tambahan mempunyai faktor dampak (impact factor) dari ISI Web of Science (Thomson Reuters)atau Scimago Journal Rank (SJR) mempunyai urutan tertinggi dalam penilaian karya ilmiah dan dinilai paling tinggi 40.
- Jurnal yang memenuhi kriteria jurnal internasional di atas dan terindeks oleh database internasional bereputasi (Web of Science, Scopus, atau Microsoft Academic Search) namun belum mempunyai faktor dampak (impact factor)dari ISI Web of Science (Thomson Reuters)atau Scimago Journal Rank (SJR) dalam penilaian karya ilmiah dan dinilai paling tinggi 30.
- Jurnal yang memenuhi kriteria jurnal internasional di atas yang belum terindeks pada database internasional bereputasi (Web of Science, Scopus, atau Microsoft Academic Search) namun telah terindeks pada database internasional seperti DOAJ, CABI, Copernicus, dan/atau laman sesuai dengan pertimbangan tim pakar Ditjen Dikti dan dapat dinilai karya ilmiah paling tinggi 20.

Impact Factor (IF)

Impact Factor (IF) atau Faktor Dampak dari jurnal ilmiah adalah indeks ilmiah yang mencerminkan jumlah rata-rata kutipan tahunan yang diterima oleh artikel yang diterbitkan dalam dua tahun terakhir di jurnal tersebut. Jurnal dengan IF yang lebih tinggi dianggap lebih baik dibandingkan jurnal dengan faktor dampak yang lebih rendah

$$IF_{y} = \frac{Citations_{y-1} + Citations_{y-2}}{Publications_{y-1} + Publications_{y-2}}$$

For example : Nature (IF = 41,577)

$$IF_{2017} = \frac{Citations_{2016} + Citations_{2015}}{Publications_{2016} + Publications_{2015}} = \frac{32389 + 41701}{880 + 902} = 41,577$$

Note: The impact factor was devised by <u>Eugene Garfield</u>, the founder of the <u>Institute for Scientific Information</u> (ISI). Impact factors are calculated yearly starting from 1975 for journals listed in the <u>Journal Citation Reports</u> (JCR). ISI was acquired by <u>Thomson Scientific & Healthcare</u> in 1992, and became known as Thomson ISI. In 2018, Thomson ISI was sold to <u>Onex Corporation</u> and <u>Baring Private Equity Asia</u>. They founded a new corporation, Clarivate, which is now the publisher of the JCR.

h-index

Web of Science: h-index information

Calculating:

Seorang peneliti (atau sekumpulan paper) memiliki sebuah **h-index** of N jika dia telah menerbitkan N makalah yang masing-masing memiliki N kutipan atau lebih.

H-index didasarkan pada data Times Cited dari database. Ini tidak akan mencakup kutipan dari sumber yang tidak diindeks

Note: The h-index was developed by J.E. Hirsch and published in

Proceedings of the National Academy of Sciences of the United States of America 102 (46): 16569-16572 November 15 2005. It reflects the productivity of authors based on their publication

and citation records

Impact Index of Journals; Quartile (Q)

Setiap katagori subjek **journals (berdasarkan JCR)** dibagi menjadi **empat quartiles** yaitu: **Q1**, **Q2**, **Q3**, **Q4**.

Q1 is occupied by the top 25% of journals in the list;

Q2 is occupied by journals in the 25 to 50% group;

Q3 is occupied by journals in the 50 to 75% group and

Q4 is occupied by journals in the 75 to 100% group.

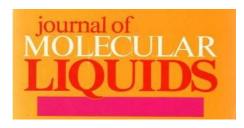
The **most prestigious journals** within a subject area are those which occupy the first quartile, **Q1**

Note: **Journal Citation Reports (JCR):** It includes publications reviewed by the most widely-cited experts in the world and covers approximately 200 different disciplines. JCR can be accessed online via the *Web Of Science* platform (WOS) and can be used to run online searches and look up the Impact Factor of a given journal or a group of journals and make comparisons between these. The impact factor is calculated annually by the *Institute for Scientific Information* (ISI).

Reasonable

Good scientific papers





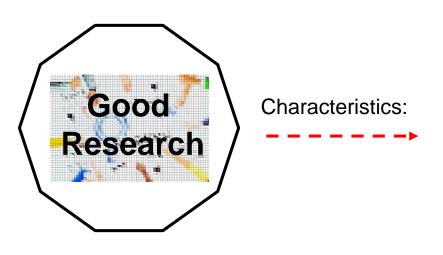


Good research & analysis



https://www.flycatcher.eu/en

Good Research



- ✓ Handling real problems
- ✓ Systematic >< Unorderly
 </p>
- ✓ Empirical evidence >< Not impression
 </p>
- ✓ Objective, logical and rationale
- ✓ Appropriate method and equipment
- ✓ Open mind and patiently
- √ Replicable

Addition:

- A good researcher should always consult others; supervisor, laboratory members, experts, etc.
- Data analysis should be complete and comprehensive, answer the problems

Supporting activities:



- □ Specific or additional lecture/training
- □ Regular group/lab meeting
- Journal/book discussion
- □ Seminar
- Conference
- ☐ Etc.

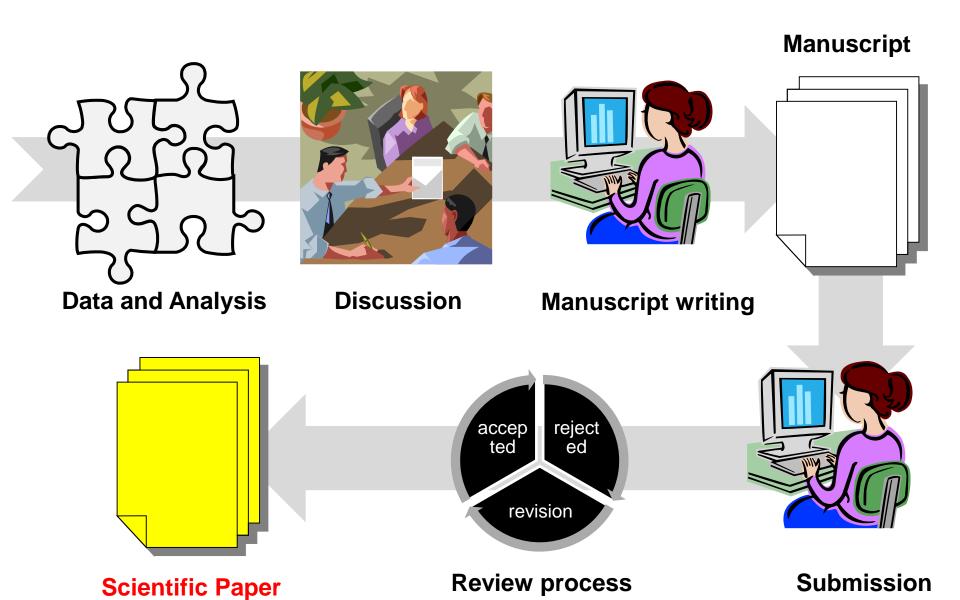




Addition:

- Sometimes some students need entertainment and small party activities for refreshing
- Sport, yoga and traveling can be an option

Process: Research Data → **Scientific Paper**



Scientific Journal Selection



- ✓ Subject, scope
- ✓ Impact factor (IF), Quartile (Q), Index
- ✓ Article types (regular paper, letters, review, brief notes, comments, etc.)
- ✓ Average time to first decision
- ✓ How to submit an article (instruction to author)
- ✓ Publication charge

Addition:

- Journal acceptance criteria
- Journal rejection criteria

Q1/Q2 Journal Acceptance Criteria

PRL Acceptance Criteria

Submitted manuscripts should meet one or more of the following criteria:

- Open a new research area, or a new avenue within an established area.
- Solve, or make essential steps towards solving, a critical problem.
- Introduce new techniques or methodologies with significant impact.
- Be of unusual intrinsic interest to PRL's broad audience.

PRL earns one citation every 80 seconds, for a total of 427,669 in 2016. The editors bring attention to outstanding research and elucidate its importance through a number of features:

Nature Acceptance Criteria

The criteria for publication of scientific papers (Articles) in *Nature* are that they:

- report original scientific research (the main results and conclusions must not have been published or submitted elsewhere)
- are of outstanding scientific importance
- reach a conclusion of interest to an interdisciplinary readership.

Nature has space to publish only 8% or so of the 200 papers submitted each week, hence its selection criteria are rigorous. Many submissions are declined without being sent for review.

https://www.nature.com/nature/for-authors/editorialcriteria-and-processes

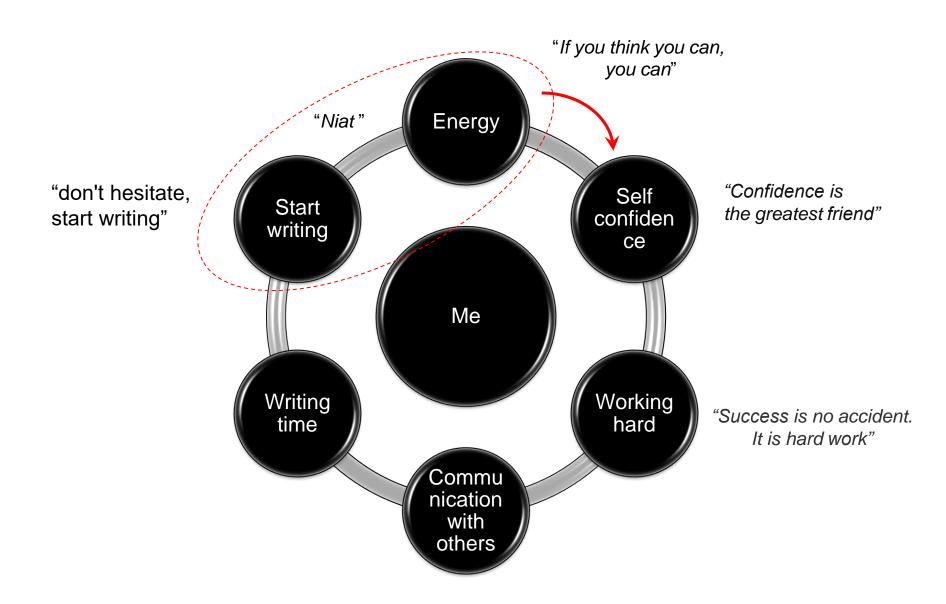
Rejection Criteria

http://media.journals.elsevier.com/content/files/acceptance-and-rejection-criteria-27115817.pdf

A new submission is first evaluated by the Editor-in-Chief. The evaluation starts with reading the **Title** and **Abstract**, which are therefore of crucial importance. The Abstract should be convincing that the paper fits the scope and has an innovative contribution in the field. If not, the paper may already be rejected before being reviewed.

1. It fails the technical screening

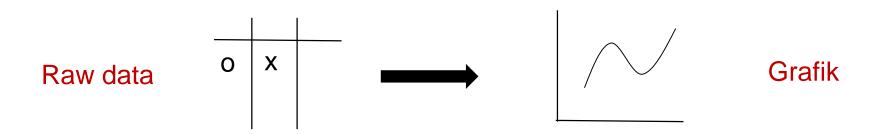
- The article contains elements that are suspected to be plagiarized, or it is currently under review at another journal;
- The manuscript is not complete;
- The English (spelling and grammar) is not sufficient for the peer review process;
- The figures are not complete or are not clear enough to read.
- The article does not conform to the Guide for Authors for the journal it is submitted to.
- The references are incomplete or (mostly) very old.
- 2. It does not fall within the Aims and Scope
- 3. The procedures and/or analysis of the data are seen to be defective
- 4. The conclusions cannot be justified on the basis of the rest of the paper. The arguments are illogical, unstructured or invalid; the data do not support the conclusions. The conclusions ignore large portions of the literature.
- 5. The paper reports only a small extension of literature published elsewhere it lacks novelty



Well Organized → Story line for all of data/figures

Preparation	Writing	Submission
Pata Graphs Figures Analysis Journal? IF and Q and connat Tables Literature	Abstract PACS numbers Introduction Materials & Experiment Results & Discussion Conclusion	Online submission Create an account Cover letter
Literature	References	Reprint order

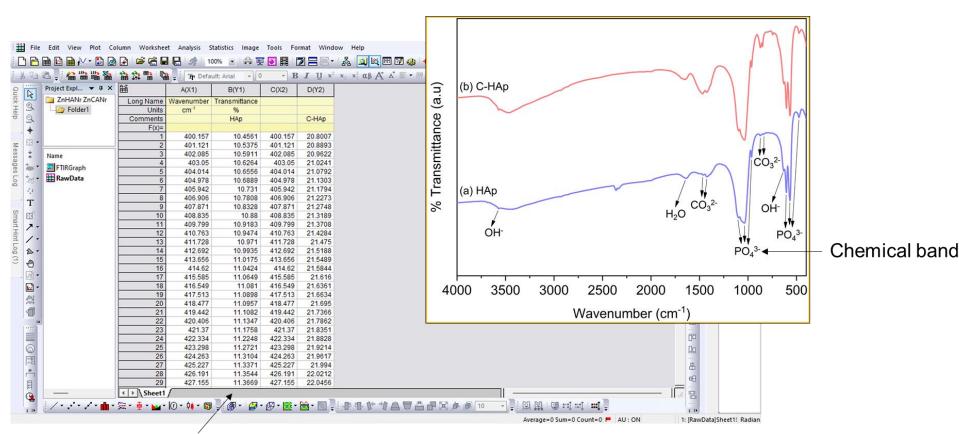
Data Preparation



OriginLab; Software Origin biasa digunakan untuk menganalisis data seperti hasil FTIR dan XRD hingga hasil uji toksisitas, sehingga diperoleh figur yang dapat disajikan dalam manuskrip. Untuk data FTIR dan XRD, hasil analisis yang diperoleh berupa grafik

Data Preparation (Graphing)

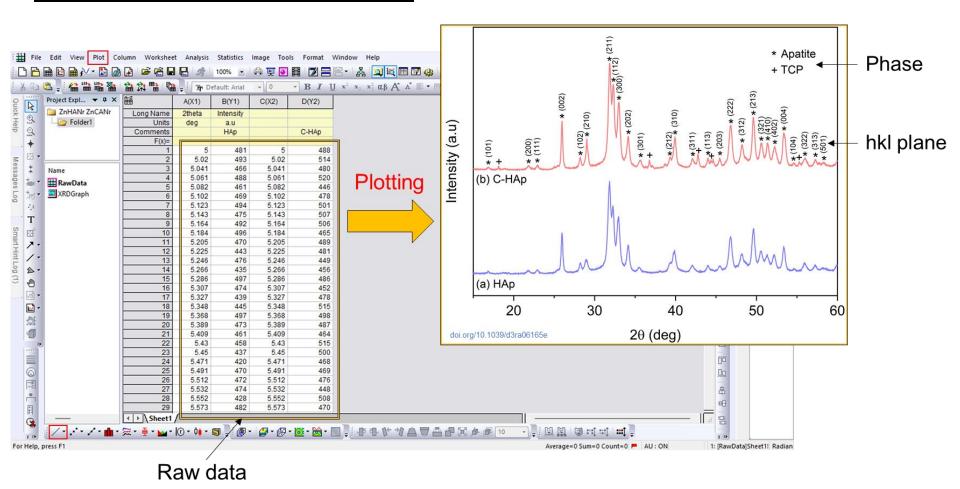
FTIR



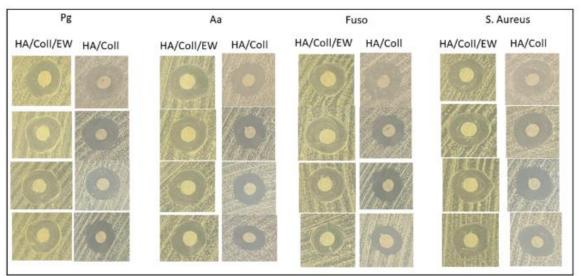
Raw Data

Data Preparation (Graphing)

XRD

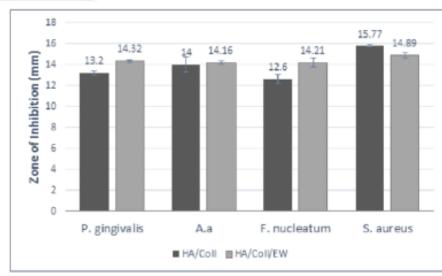


Data Preparation (Graphing)



Antibacterial Activity

The Zone of Inhibition (ZoI) is a circular area around the spot of the antibiotic in which the bacteria colonies do not grow. The zone of inhibition can be used to measure the susceptibility of the bacteria to wards the antibiotic.



Writing Structure:

- Title
- Authors
- Affiliation
- Abstract
- Introduction
- Materials and Method
- Result
- Discussion
- Conclusion
- Acknowledgements
- References

Sari et al. Biomaterials Research (2021) 25:2 https://doi.org/10.1186/s40824-021-00203-z

Biomaterials Research

RESEARCH ARTICLE

Open Access

Bioceramic hydroxyapatite-based scaffold with a porous structure using honeycomb as a natural polymeric Porogen for bone tissue engineering



Mona Sari¹, Puspa Hening², Chotimah¹, Ika Dewi Ana³ and Yusril Yusuf^{1*}



- memberi deskripsi apa yang dilakukan
- singkat dan tidak ambigu
- gunakan kata deskriptif, menggambarkan apa adanya
- can be written earlier, but is often modified once the final form of the paper clearly known.

Author's names



Affiliation



ARTICLE INFO

Keywords: Carbonated hydroxyapatite Pores structure Scaffold Biomedical application

ABSTRACT

In this work, bioceramic carbonated hydroxyapatite (CHA) was synthesized from abalone mussel shells (Halioitis asinina) using a co-precipitation method; CHA-based scaffolds were fabricated with honeycomb (HCB) as the porogen agent. The concentration of HCB porogen varied among 10, 20, 30, and 40 wt%. The Energy Dispersive X-Ray Spectroscopy (EDS) analysis revealed that the Ca/P molar ratio of CHA was 1.73, which was close to natural bone's Ca/P molar ratio of 1.71. Fourier Transform Infrared Spectroscopy (FTIR) and X-Ray Diffractometer (XRD) tests revealed that the formed phase of the synthesized CHA was of the B-type. Analysis of the pores structure showed an increasing porogen concentration, pores size, and porosity of the scaffold. The addition of HCB porogen also decreased the crystallite size. This was very good for bone growth because the low crystallinity created dislocations, making it easier for cells to proliferate. Based on the results of cell viability assay on scaffold CHA + HCB 40 wt%, the growth of MC3T3E1 cells was inhibited beginning at a scaffold concentration of 500 μg/mL because the percentage of viability decreased to ~ 115 % and the IC50 value of MC3T3E1 cells on the scaffold to 691830.97 μg/mL. Based on to the one-way ANOVA, those result reflected no statistically significant differences in the average of cell viability value in the five groups (p > 0.05). The cell metabolic activity and morphology of the CHA + HCB 40 wt% scaffold enable it to facilitate the attachment of MC3T3E1 cells on its surface. Thus, HCB 40 wt% was the best concentration to fabricate the scaffold based on the criteria for pores structure, crystallographic properties, chemical decomposition process and cell viability for biomedical applications.

Keywords



The Physics and Astronomy Classification Scheme (PACS) number

Abstract

- summary of entire paper, brief description
- singkatnya menggambarkan apa yang telah dilakukan
- pendahuluan (present tense), tujuan (present), hasil (past) kesimpulan (present)
- 200 300 kata

1. Introduction

Liquid crystal elastomers (LCEs) have attracted much attention in recent years due to one possible candidate of artificial muscles because of their thermomechanical and electro-mechanical effects [1–8]. LCEs consist of the cross-linked polymer chain networks and the liquid crystalline ordering of side chain mesogenic groups. They can respond to thermal change but, unlike usual low molecular weight LC (LMWLC), cannot easily respond to electric fields as well as magnetic fields. Very recently, swollen LCEs with anisotropic solvents have been studied as the most promising material for artificial muscles operated by small intensity of electric fields due to the large electro-mechanical effect [4,5]. However swollen LCEs with LMWLC show a lot of strange features such as swollen dynamics, volume

E-mail addresses: yusuf@athena.ap.kyushu-u.ac.jp (Y. Yusuf), kaitap@mbox.nc.kyushu-u.ac.jp (S. Kai). changes on temperature, various and unknown phase transitions and electric field dependences which are quite different from those in dry LCEs [4,5]. The physical mechanisms for them however have not been well understood yet.

In order to understand the swelling mechanism due to phase transitions, therefore, we have been investigating the detailed dynamics for both monodomain and polydomain LCEs swollen with LMWLCs [5,9]. Volume change dynamics of swollen LCEs as a function of temperature show a variety different transitions [4,5] as well as birefringence measurement of swollen liquid single crystal elastomer (LSCE) [9]. We have reported then that swollen LSCE shows significant volume changes and birefringence at temperature T_{NI} , T_A and T_B which correspond to the phase transition temperatures of the nematic-isotropic one for outside LMWLC (5CB), that for inside LMWLC of the swollen LSCEs_ and for swollen LSCE, respectively. In this Letter we will report the hystreses of volume changes at those transition temperatures.

Introduction

- 1. literature study
- 2. what we did
- 3. what we will report

^{*}Corresponding author. Fax: +81-92-642-3820.

2. Materials & methods

2.1. Materials

The materials for synthesizing CHAp were NH₄HPO₄, and NaHCO₃ and were purchased from Merck (USA). The source of calcium (CaO) was snail shells (*Pila ampullacea*), as our previous work on our lab. NH₄OH, used for pH control, was purchased from Merck (USA). PVA with molecular weight 145.000 (100% hydrolyzed) was purchased from Merck (Germany), chitosan (CS) with medium molecular weight was purchased from Sigma-Aldrich (USA). Acetic acid (100%) was purchased from Merck (Germany). Fetal bovine serum (FBS) and phosphate buffered saline (PBS) were purchased from Sigma-Aldrich (USA).

Material & Methods

- how the experiment procedure were carried out
- how the data were analyzed
- all materials must be identified
- follow international standard units (SI)
- all equipment must be identified (types, vendor, serial number, country)

2.5. Characterizations of CHAp nanoparticles and nanofibrous PVA/CS/ CHAp scaffolds

2.5.1. Morphology analysis

The size and morphology of the CHAp particles were determined by transmission electron microscopy (TEM, Joel Jem-1400, Japan), and the morphology of nanofibers was observed by scanning electron microscopy (SEM, Joel JSM-6510LA, Japan). The average diameter of the fibers was calculated based on measurement of 100 randomly selected fibers. Energy dispersive X-ray spectroscopy (EDS), included in the SEM, was used to determine the carbon (C), calcium (Ca), and phosphorus (P) composition of the CHAp powders. An elemental mapping feature in the EDS was used to evaluate the dispersion of the CHAp nanoparticles in the nanofibers.

2.5.2. Crystallography analysis

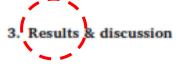
The crystallographic properties of CHAp powder and PVA/CS/ CHAp scaffolds were determined by X-ray diffraction (XRD, PANanalytical Type X'Pert Pro, Japan). The XRD data were recorded in the range 2θ : $10-60^{\circ}$ using Cu–K α radiation at λ = 0.154 nm.

2.5.3. FTIR analysis

Fourier transform infrared spectroscopy (FTIR, Thermo Nicolet iS10, Japan) was used to determine the functional group within the CHAp powder and the PVA/CS/CHAp scaffolds. Either the powder or scaffold membrane was ground and mixed with potassium bromide (KBr) and then pressed into compact tablets. The FTIR instrument was operated in the range 400–4000 cm⁻¹.

Results and Discussion

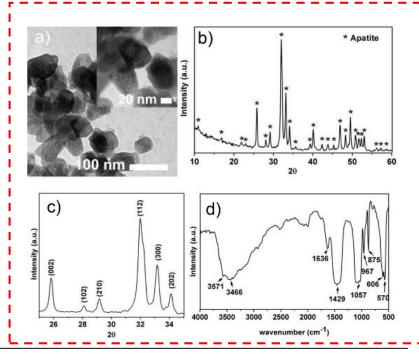
- Data (table, graphs dan figures) yang disajikan harus memberikan informasi yang lengkap
- Results harus menyajikan data utama secara objektif dan tanpa interpretasi dan dituliskan secara bertahap mengikuti urutan data
- Jangan menampilkan table, grafik dan figure dari data yang sama.
 - Discussion memberi interpretasi terhadap results dan menjelaskan tentang pemahaman baru dari hasil tsb.
 - Bisa menambahkan referensi untuk mendukung interpretasi tsb.
 - Do not introduce new results in discussion



3.1. Properties of CHAp nanoparticles

The TEM image of CHAp (Fig. 1a) shows that CHAp was successfully synthesized as nanoparticles with a round shape and an average particle size of 49.79 ± 20.90 nm (calculated from 25 randomly chosen particles). This result is similar to the size of carbonated apatite minerals found in native ECM, which have an average dimension of 50 × 25 × 4 nm [8]. Fig. 1a shows that the CHAp nanoparticles are nanoporous, a feature that may provide larger surface areas for ion exchange and interaction with proteins and cells. Fig. 1b shows the XRD pattern of CHAp after sintering at 600 °C for 2 h. All the observable peaks correspond to apatite peaks (PDF number 09–0432). Fig. 1c shows the main peaks of CHAp. The peak around 32° corresponds to the plane (112) overlapped with the peak of the plane (211) as a typical peak of carbonated hydroxyapatite [38].

Higher magnificent of osteoblast cells' morphology that shown in Fig. 13k intends to evaluate the main idea of mimicking the ECM-like structure of bone to provide microporous and rough sites for cells attachment and proliferation. The figure shows interaction between cells and fibrous structure on scaffold. The figure suggests that the ECM-like structure of scaffold provides appropriate sites for cells to anchor and form mechanical interlock with the ECM-like structure, therefore may lead to better cells attachment and proliferation [1]. The microporous structure of the scaffold also provides high surface area that is able to increase the sites for cell attachment [1,9]. Overall, cell viability of scaffolds and cells' morphology reveal that the nanofibrous PVA/CS/CHAp scaffold is able to facilitate the osteoblast cells to attach and proliferate on its surface.



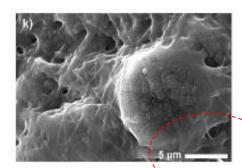


Fig. 13. Osteoblast cells' morphology on PVA/CS/CHAp (a-b) 0 wt%, (c-d) 5 wt%, (e-f) 10 wt%, (g-h) 15 wt%, (i-j) 20 wt%, (k) and a higher magnification of osteoblast cells' morphology on fibrous structure of PVA/CS/CHAp 15 wt%.

Conclusions



4. Conclusion

In this research, we successfully fabricated a nanofiber PCL/PLGA doped with CHA and EW by an electrospinning technique that showed unique characteristics. The substitution of CHA and EW greatly influenced the mechanical properties of the nanofiber. The additional CHA (PCL/PLGA/CHA) increased the Young's modulus while EW substitution (PCL/PLGA/CHA/EW) increased the elongation at break. PCL/PLGA/CHA/EW had the highest fiber diameter after SBF immersion for 9 days, indicating the ability to absorb a lot of water, which is an important parameter for its cell adhesion ability. Biocompatibility assay of fibroblast cells on PCL/PLGA/CHA/EW showed good cell proliferation (85%) and the sample with EW with a lower concentration showed ability as an antibacterial agent in PCL/PLGA/CHA/EW against S. aureus.

Acknowledgement



References



- What we did, in general
- No discussion
- Main results for each testing/observation/calculating



Final Manuscript

Pra-Submission

 Tentukan Jurnal yang akan dituju. What would you like to know about the journal (IF, Q, APC, time for decision, scopes, etc.)

Read this journal

Submit an article

- Lihat submission guidelines
- Create an Account for Log in

What would you like to know about RSC Advances?

Impact factor: 3.9*

Editors-in-Chief: Russell Cox and Karen Faulds

Time to first decision (all decisions): 14.0 days**

Time to first decision (peer reviewed only): 25.0 days***

Acceptance rate (2023): 37%

Editors-in-Chief: Russell Cox and Karen Faulds

Indexed in Scopus, Web of Science, Directory of Open Access Journals (DOAJ) and PubMed Central

Publications from 112 countries in 2022

Article Processing Charge (APC) for Open Access: £750



Reset Password

Password

Log In

......

Log in using Web of ScienceTM

RSC Advances

Pra-Submission

- Proofreading and Editing jika diperlukan
- Cek Similarity jika diperlukan

higher zinc and carbonate-doped Ca-Mg-P antimicrobial activity with larger inhibition zone.

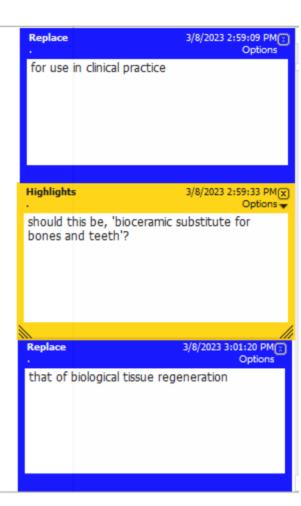
Keywords:

Whitlockite, magnesium-hydroxyapatite, zinc, carbonate, antibacterial activity

1. Introduction

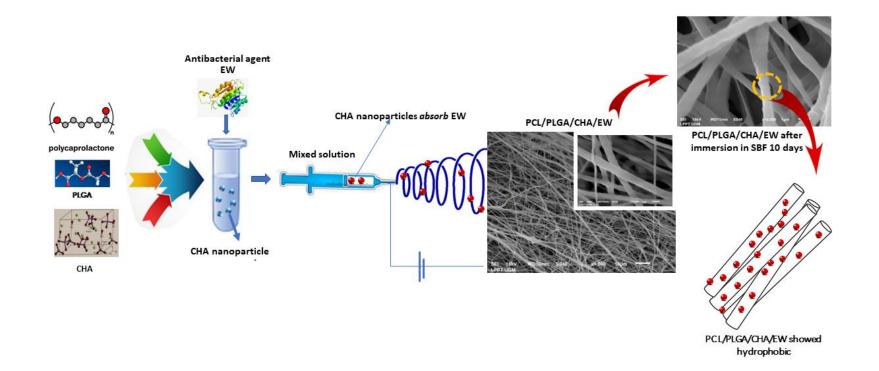
Hydroxyapatite (HA; $Ca_{10}(PO4)_6(OH)_2$) has been widely investigated as bone and tooth bioceramic materials used in the clinic [1–3]. HA is well known for its similarity to bone and teeth in composition and crystal structure [4,5]. However, resorption rate of HA is much slower than resorption rate in regeneration of biological tissue due to its relatively low solubility [6]. This case in natural bone regeneration can be induced by β-tricalcium phosphate (β-TCP; $Ca_3(PO_4)_2$) because of its high solubility, but β-TCP is formed after

hast treatment above 000 9C which course of TCD not to presinitate under higherical



Pra-Submission

- Graphical Abstract
- Abstrak grafis adalah satu gambar satu panel yang disiapkan untuk memberikan pemahaman langsung kepada pembaca tentang pesan yang dibawa dari karya ilmiah



Manuscript Submission

- Tulis manuscript sesuai submission guidelines/template
- Lengkapi dengan cover letter untuk Editor
- Dapat mengusulkan para referee yang tepat

Prof. Kanji Tsuru Fukuoka Dental College Editor in Chief Dental Materials Journal

March 23, 2021

Dear Prof. Andreas Stavropoulos

We are pleased to submit our manuscript entitled "Development Hydroxyapatite Nanoparticle-based Gel for Enamel Remineralization—A Physicochemical Properties Analysis," by Mona SARI, Dewi Monica RAMADHANTI, Rizki AMALINA, Chotimah, Ika Dewi ANA and Yusril YUSUF for consideration to publication in the Dental Materials Journal.

In this work, nano-hydroxyapatite (HA) was synthesized from abalone mussel shells (Haliotis asinina) using a precipitation method, and gel HA-Abalone was developed using the carbomer materials with concentrations of carbomer to nano-HA of 0, 10, 20, 30, and 40 wt%. The specimens used were 25 of freshly extracted caries-free premolars teeth and the treatment were done twice a day for 14 days. The synthesized nano-HA particles exhibited the functional groups of HA and the calcium-to-phosphorus (Ca/P) molar ratio of 1.67 (the stoichiometric ratio of HA) and the crystallite size of (33.91 ±

If you feel that this manuscript is appropriate for your journal, we suggest the following reviewers:

Prof. Karl-Heinz KUNZELMANN

Ludwig Maximilian University, Germany

Karl.Kunzelmann@ur.de

Research Interest: Dental materials, cariology, treatment of dental caries, oral radiology, and any other related field.

Prof. Hockin XU

Research Interest: Dental materials, nanocomposites, tooth restorations, caries inhibition, fluoride-based materials, calcium phosphate biomaterials, tissue engineering, and any other related field.

Dr. Azade Rafiee

Oral and Dental Disease Research Center, Department of Pediatric Dentistry, School of Dentistry, Shiraz University of Medical Sciences, Shiraz, Iran arafiee@sums.ac.ir

Research Interest: Clinical dentistry, dental caries, restorative dentistry, and any other related field.



Dear Professor. Russell Cox and Professor Karen Faulds Editors-in-chief RSC Advances

We are pleased to submit our manuscript entitled "Nanofibrous Electrospun Scaffold Deped with Hydroxyapatite Derived from Sand Lobster Shell (Panulirus homarus) for Bone Tissue Engineering" by I Kadek ariscandra Dinatha, Arian Hermawan Diputra, Hevi Wihadmadyatami, Juliasih Partini and Yusril Yusuf for consideration of publication in the RSC Advances.

This manuscript presents the finding of nanofiber scaffold membranes based on the hydroxyapatite (HAp) synthesised from sand lobster (SL; Panulirus homarus) shells as a calcium source due to the SL shell having about 90% calcium content. The SL has moulting cycles periodically, which results in SL shell waste. The nanofiber was fabricated using electrospinning method with PVA/PVP/CS polymers. The addition of HAp derived from SL Shells enhanced the phofiber scaffold membrane's mechanical and bioactivity properties, allowing the cell osteoblast (MC3T3E1) to attach and proliferate. Based on this study, the PVA/PVP/CS/HAp 5% has the most potential characteristics for bone tissue engineering application based on the in vitro viability assay. The PVA/PVP/CS/HAp nanofiber based on HAp from the SL shell will overcome the challenge of significant segmental bone defects because the PVA/PVP/CS/HAp will mimic bone structures and have biocompatibility, bioactivity, biodegradability, and osteoconductivity to native bone tissue.

We believe these findings will interest the readers of your journal. This manuscript has represent published and is not under consideration for publication elsewhere. We know of no conflicts of interest associated with this publication, and no significant financial support for this work has influenced its outcome.

Thank you for your consideration. We look forward to hearing from you.

Sincerely,
Yusril Yusuf (corresponding author)
Department of Physics
Faculty of Mathematics and Natural Sciece, Universitas Gadjah
Mada, Yogyakarta, Indonesia
yusril@ugm.ac.id

- 1. Title and authors
- 2. What we will report
- 3. Statement

Manuscript Revision

- Pahami hasil review dan editor/referee comments
- Lakukan revisi sesuai hasil review
- Kembali jelaskan di cover letter hasil revisi saat resubmission
- jika diperlukan, dapat mengajukan keberatan dari hasil review

Dear Dr. Yusuf,

Your manuscript, referenced below, has been reviewed for Applied Physics Letters. "Multifunctional liquid crystal elastomers; large electro-mechanical and -optical effects" L07-08693 The reviewer's comments are included below and/or attached. In view of his/her recommendations, we cannot accept your paper for publication in its present form. If you revise the paper to meet the reviewer's objections, we will be happy to give it further consideration.

We are disappointed and request a more physics oriented referee for our paper. For example: Phillipe Martinoty (Institut de Mecanique des Fluides et des Solides, UMR 7507, CNRS-ULP, 67000, Strasbourg, France, philippe.martinoty@ldfc.u-strasbg.fr).

Manuscript Revision_Cover Letter

Laura Fisher
Executive Editor
RSC Advances

Dear Laura Fisher,

Thank you for allowing us to submit our revised manuscript entitled "Functionalized Cellulose Nanofibrils in Carbonate-Substituted Hydroxyapatite Nanorods-Based Scaffold from Long-Spined Sea Urchin (*Diadema setosum*) Shells Reinforced with Polyvinyl Alcohol for Alveolar Bone Tissue Engineering," with manuscript ID RA-ART-09-2023-006165. We appreciate the time and effort you and the reviewers have dedicated to providing valuable feedback on our manuscript. Likewise, we thank the reviewers for their insightful comments on our paper. As a result, we were able to implement changes to reflect most of the suggestions provided by reviewers. Additionally, we have highlighted (in the comments) the changes in the manuscript.

Here is a point-by-point response to the reviewer's comments and concerns.

Referre 1

Recommendation: Minor revisions

Comments:

In this work, the authors fabricated C-HAp/PVA scaffold for alveolar tissue engineering.

- Figure 5A, it will be interesting to see the antibacterial test of both HAp and C-HAp in the same plate. Please provide the whole plate photograph for better understanding.

Response: The antibacterial test was conducted to analyse the addition of polymer and cellulose in C-HAp nanorods-based scaffold. The comparative study was discussed within the antibacterial activity of nanorods and scaffolds.

- Figure 10A, please add the whole plate image for the antibacterial test.

 Response: The figures for antibacterial test results have been revised, and the whole plate image has been added to the manuscript.
- The scaffolds in Fig 5 and 10 used for an antibacterial test look the same. Please explain how the author made the only nanorod scaffold (Fig 5)?

Response: The antibacterial test for C-HAp nanorods and C-HAp/PVA-based scaffold was taken in the same plate for comparative study. Regarding the antibacterial test, the nanorod-based scaffold is required for this study due to the advantage of nanoparticles that can easily penetrate the bacterial medium to induce higher inhibition. The rod-like shape of the nanoparticle also has more surface area to promote higher ion release. We have provided the results for the antibacterial test in Fig. 9 and Fig. 10.

-In Figure 13, the cell images are unclear; please provide the live/dead cell images for the cell viability assay.

Response: The morphology of NIH/3T3 fibroblast cells after 24 h incubation has been revised.

-The author stated that the scaffold is suitable for alveolar bone tissue engineering. It will be great to see the stem cell culture within the scaffold and its gene expression for alveolar bone.

Response: The alveolar bone stem cell was very difficult to obtain for cell experiments in our laboratory. The alveolar bone is also part of the dental bone, mostly constructed by fibroblast stem cells. Therefore, we conducted the preliminary analysis of the cell

Decision on Submission

Decision on submission to RSC Advances - RA-ART-11-2023-007486

2 messages

RSC Advances <onbehalfof@manuscriptcentral.com>

Tue, Nov 7, 2023 at 2:21 PM

Reply-To: advances@rsc.org

To: yusril@ugm.ac.id

07-Nov-2023

Dear Dr Yusuf:

Manuscript ID: RA-ART-11-2023-007486

TITLE: Enhance Properties and Bioactivity of Poly-ε-Caprolactone/Poly Lactic-Co-Glycolic Acid with dopped Carbonate hydroxyapatite-Egg white

Thank you for submitting your revised manuscript to RSC Advances. I am pleased to accept your manuscript for publication in its current form. I have copied the comments from the reviewer(s) below.

You will shortly receive a separate email from us requesting you to submit a licence to publish for your article, so that we can proceed with the preparation and publication of your manuscript. We will email you information on how to access your RSC Advances article proofs when they are ready.

All RSC Advances articles are published under an open access model, and the appropriate article processing charge (APC) will apply. Details of the APC and discounted rates can be found at https://www.rsc.org/journals-books-databases/about-journals/rsc-advances/#charges-RSC-Advances.

Payment

Payment details required for your article - D4RA00619D

1 message

RSC Advances <RSC1@rsc.org> To: yusril@ugm.ac.id Sat, Feb 24, 2024 at 10:01 AM

Saturday, February 24, 2024

Dear Dr Yusuf.

TITLE: Nanofibrous Electrospun Scaffold Doped with Hydroxyapatite Derived from Sand Lobster Shell (Panulirus homarus) for Bone Tissue Engineering

JOURNAL: RSC Advances

MANUSCRIPT ID: D4RA00619D

You have requested to publish your article gold open access and are therefore required to pay an article processing charge(APC) of £750.00 (+ tax).

Please note that membership or institutional discounts may apply. This will be shown to you when you make your payment following the link below.

In our hybrid journals we are unable to publish your article until we have received payment, so please provide payment information as soon as possible to avoid delays.

Follow this link to provide payment information:

Proof



PROOF COPY 053817APL

APPLIED PHYSICS LETTERS 92, 1 (2008)



Author Queries

¹ Multifunctional liquid crystal elastomers: Large electromechanical and ² electro-optical effects

3	Shigehiro Hashimoto, 1 Yusril Yusuf, 2,1,a) Simon Krauşe, 3 Heino Finkelmann, 3		
	P. E. Cladis, ^{4,b)} Helmut R. Brand, ^{5,c)} and Shoichi Kai ^{1,6,d)}		
4 5 6 7 8 9	¹ Department of Applied Quantum Physics and Nuclear Engineering, Graduate School of Engineering,		
6	Kyushu University, Fukuoka 819-0395, Japan		
7	² Physics Department, Faculty of Mathematics and Natural Sciences, Gadjah Mada University, Yogyakarta		
8	55281, Indonesia		
9	³ Makromolekulare Chemie, Universität Freiburg, 79104 Freiburg, Germany		
10	⁴ Advanced Liquid Crystal Technologies, POB 1314, Summit, New Jersey 07902, USA		
11	⁵ Theoretische Physik III, Universität Bayreuth, 95440 Bayreuth, Germany		
12	⁶ Department of Applied Physics, Faculty of Engineering and Department of Life Engineering, Graduate		
13	School of Systems Life Sciences, Kyushu University, Fukuoka 819-0395, Japan		
14	(Received 7 October 2007; accepted 7 April 2008)		
15	A multifunctional main chain liquid crystal elastomer (MCLCE) with large mechanical and optical		
16	effects in applied electric fields is investigated, when MCLCE is swollen in a low molecular weight		
17	liquid crystal, 4-n-pentyl-4-cyanobiphenyl, a nematic solvent. The size change by the field effects is		
18	linearly proportional to the transmittancy change. This suggests the possibility of broad application		
19	as a field-induced-optical actuator device. © 2008 American Institute of Physics.		
20	[DOI: 10.1063/1.2917465]		
21			



General Tips

Q -1 : Ingin menulis di Jurnal Bereputasi, tapi ada masalah dalam menulis *English*

A -1a: Tulis manuskrip dalam Bahasa



A -1b: Gunakan translator



A -1c: Gunakan grammar checker



A -1d: Gunakan editing and proofreading services



Addition:

- Dengan membaca jurnal referensi juga bisa membantu dalam menyusun kalimat, namun hindari plagiarism dan similarity
- Bermitra dengan native sebagai author juga bisa membantu first editing.

General Tips

Q -2 : Bagaimana bila merujuk dan melakukan copy pasted dari jurnal lain

A -2a : Lakukan sitasi, gunakan reference management



https://www.mendeley.com/

A -2b : Jika copy pasted berupa kalimat, lakukan paraphrase atau membuat kalimat baru berdasarkan interpretasi sendiri

A -2c : Gunakan *plagiarism* dan *similarity checker*



Addition:

- Plagiarisme dapat berupa mencuri ide seseorang, text, figure, model, table, equation, flowcharts dll., dan dinyatakan menjadi miliknya. Toleransi untuk plagiarism adalah 0%.
- Similarity berkaitan dengan penciplakan teks akibat copy pasted. Rasio diterimanya similarity biasanya adalah lebih kecil dari 20%

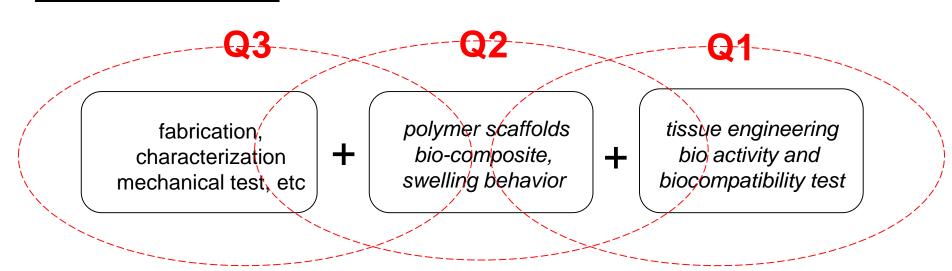
General Tips

Q -3: Hasil riset dan peluangnya untuk dipublikasi di jurnal bereputasi (Q1, Q2, Q3)

A -3a: Originality dan novelty

A -3b : Perkirakan sejauh mana hasil riset dan bgm kedalaman analisis dan pembahasannya

Contoh: Biomaterials



Paradoks



Source: www.poster.net/anonymous/



Source: dcsbible.wordpress.com/



Water flows downstream but fish should swim upstream to have better quality of water





Terima Kasih

yusril@ugm.ac.id

CP: 081227597007

