

LEMBAR
HASIL PENILAIAN SEJAWAT SEBIDANG ATAU *PEER REVIEW*
KARYA ILMIAH : PROSIDING

Judul Karya Ilmiah (Prosiding) : Growth of collagen-nanosilver (Co-AgNP biocomposite film with electrospinning method for wound healing applications

Nama/ Jumlah Penulis : 3 Orang

Status Pengusul : Penulis ke-3

Identitas Jurnal Ilmiah : a. Judul Prosiding : 9th International Seminar on New Paradigm and Innovation of Natural Sciences and Its Application, ISNPINSA 2019

b. ISBN/ISSN : 1742-6596

c. Thn Terbit, Tempat Pelaks. : Oktober 2019, Semarang

d. Penerbit/Organiser : Institute of Physics Publishing

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Alamat Artikel : <https://iopscience.iop.org/article/10.1088/1742-6596/1524/1/012032>

f. Terindeks di (jika ada) : Scopus

Kategori Publikasi Jurnal Ilmiah :

√

Prosiding Forum Ilmiah Internasional
(beri √ pada kategori yang tepat) *Prosiding* Forum Ilmiah Nasional

Hasil Penilaian *Peer Review* :

Komponen Yang Dinilai	Nilai Reviewer		Nilai Rata-rata
	Reviewer I	Reviewer II	
a. Kelengkapan unsur isi prosiding (10%)	2,8	2,8	2,8
b. Ruang lingkup dan kedalaman pembahasan (30%)	8,7	8,7	8,7
c. Kecukupan dan kemutakhiran data/informasi dan metodologi (30%)	8,7	8,7	8,7
d. Kelengkapan unsur dan kualitas penerbit/prosiding (30%)	8,5	8,5	8,5
Total = (100%)			28,7
Nilai untuk Pengusul : $(40\% \times 28,7)/2 = 5,74$			

Semarang, 17 Januari 2022

Reviewer 1



Prof. Dr. Heri Sutanto, S.Si., M.Si.
NIP. 197502151998021001
Unit Kerja : Universitas Diponegoro
Bidang Ilmu: Fisika Material

Reviewer 2



Prof. Dr. Kusworo Adi, M.T.
NIP. 197203171998021001
Unit Kerja : Universitas Diponegoro
Bidang Ilmu: Fisika Instrumentasi

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	Internasional 30	Nasional 	
a. Kelengkapan unsur isi prosiding (10%)	3		2,8
b. Ruang lingkup dan kedalaman pembahasan (30%)	9		8,7
c. Kecukupan dan kemutakhiran data/informasi dan metodologi (30%)	9		8,7
d. Kelengkapan unsur dan kualitas terbitan /prosiding (30%)	9		8,5
Total = (100%)	30		28,7
Nilai Pengusul = (40% x 28,7)/2 =5,74			

Catatan Penilaian Paper oleh Reviewer :

1. Kesesuaian dan kelengkapan unsur isi prosiding:

Makalah telah sesuai dengan petunjuk penulisan prosiding yang terdiri dari Introduction, Experimental, Results and Discussion, Conclusions, Acknowledgments, and References. Artikel sesuai dengan bidang ilmu penulis. Ada keterkaitan antara struktur dan alur pada artikel yang ditulis.

2. Ruang lingkup dan kedalaman pembahasan:

Isi artikel sesuai dengan ruang lingkup seminar/prosiding 9th International Seminar on New Paradigm and Innovation of Natural Sciences and its Application (ISNPINSA 2019). Pembahasan dari artikel yang ditulis telah dilakukan dengan baik dan jelas serta sudah mengkaitkan pembahasan dari 1 penelitian lain. Secara umum pembahasan masih kurang mendalam.

3. Kecukupan dan kemutakhiran data/informasi dan metodologi:

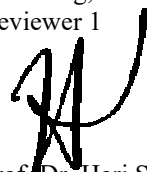
Data-data dari artikel sudah menunjukkan ada kebaharuan didukung dengan metodologi yang memadai. Artikel disusun didukung oleh 19 buah referensi kategori mutakhir. Metodologi sudah diungkapkan dengan jelas.

4. Kelengkapan unsur dan kualitas terbitan/ prosiding:

Prosiding diterbitkan pada Journal of Physics: Conference Series, Volume 1524, Issue 1, 22 June 2020. Penerbit IOP Publisher termasuk baik. Prosiding di JPCS ISSN: 1742-6588 E-ISSN: 1742-6596. Kontributor peserta sudah lebih dari 4 negara. Ada tahapan proses review artikel yang dilakukan kurang cermat seperti ditemukan perbedaan huruf pada halaman 3 dan 6.

Semarang, 8 Maret 2021

Reviewer 1



Prof. Dr. Heri Sutanto, S.Si.

NIP. 197502151998021001

Unit Kerja : Universitas

DiponegoroBidang Ilmu: Fisika

Material

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Total = (100%)	30		28,7
Nilai Pengusul = (40% x 28,7)/2 = 5,74			

Catatan Penilaian Paper oleh Reviewer :

- Kesesuaian dan kelengkapan unsur isi prosiding:**
 Makalah telah sesuai dengan petunjuk penulisan yang terdiri dari Introduction, Experimental, Results and Discussion, Conclusions, Acknowledgments, References. Ada keterkaitan antara struktur pada makalah yang ditulis dengan alur yang cukup jelas, substansi sesuai dengan pengusul/anggota penulis pada bidang fisika material (skor=2,8).
- Ruang lingkup dan kedalaman pembahasan:**
 Makalah cukup bagus sesuai ruang lingkup seminar/prosiding 9th International Seminar on New Paradigm and Innovation of Natural Sciences and its Application (ISNPINSA 2019), Semarang, 22 Oktober 2019. Pembahasan telah sesuai dengan hasil penelitian dan melibatkan 1 referensi dalam pembahasannya, akan tetapi pembahasaannya terlalu minimal sehingga kedalaman pembahasan kurang (skor=8,7)
- Kecukupan dan kemutakhiran data/informasi dan metodologi:**
 Data-data yang dihasilkan pada makalah sudah menunjukkan ada kebaruan informasi dengan metodologi cukup memadai. Jumlah total referensi ada 19, kurang dari 10 tahun ada 19 referensi, secara kuantitatif jumlah rujukan yang digunakan sudah cukup dan cukup mendukung materi yang disampaikan (skor = 8,7)
- Kelengkapan unsur dan kualitas terbitan/ prosiding:**
 Prosiding diterbitkan pada Journal of Physics: Conference Series, Volume 1524, Issue 1, 22 June 2020, Article number 012032, hasil dari ISNPINSA 2019, Semarang, 22 Oktober 2019 yang diselenggarakan oleh Fakultas Sains dan Matematika, Universitas Diponegoro, ISSN: 1742-6588 E-ISSN: 1742-6596. Keterlibatan peserta lebih dari 4 negara, akan tetapi proses review makalah kurang teliti ditemukan perbedaan huruf pada halaman 3 dan 6 (skor = 8,5)

Semarang, 7 Oktober 2020
 Reviewer :

Nama Dr. Kulworo Adi, M.T.
 NIP. 197203171998021001
 Unit Kerja : Universitas Diponegoro
 Bidang Ilmu: Fisika Instrumentasi

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1 of 1

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Journal of Physics: Conference Series
Volume 1524, Issue 1, 22 June 2020, Article number 012032
9th International Seminar on New Paradigm and Innovation of Natural Sciences and Its Application, ISNPINSA 2019; Semarang, Central Java; Indonesia; 22 October 2019 through ; Code 161297

Growth of collagen-nanosilver (Co-AgNP) biocomposite film with electrospinning method for wound healing applications (Conference Paper) (Open Access)

Subagio, A. , Umiati, N.A.K., Gunawan, V. 

Department of Physics, Faculty of Science and Mathematics, Diponegoro University, Jl. Prof. Sudarto, SH. Tembalang, Semarang, 50275, Indonesia

Abstract

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Silver nanoparticles (AgNP) are classified as metal-based nanoparticles and have received considerable attention among researchers in the application of wound healing, due to their physicochemical and biological properties. In this research silver nanoparticles (AgNP) will be combined with collagen to collagen-nanosilver (Co-AgNP) grown by electrospinning method into nanofiber film. The optimum parameter of the electrospinning process using an electric voltage of 25 kV at a spray distance of 20 cm becomes based on the process growth of Co-AgNP film. By using PVA as an electrospun polymer, the collagen-nanosilver composite (Co-AgNP) can be grown into a film that can be used as a wound dressing. © Published under licence by IOP Publishing Ltd.

SciVal Topic Prominence ⓘ

Topic: Bandages | Electrospinning | Nanofibers

Prominence percentile: 99.189 ⓘ

Indexed keywords

Engineering controlled terms:

- Collagen
- Electrospinning
- Film growth
- Metal nanoparticles
- Physicochemical properties
- Silver nanoparticles
- Tissue regeneration

Engineering uncontrolled terms

- Biocomposite films
- Biological properties
- Electric voltage
- Electrospinning method
- Electrospinning process
- Electrospun polymers
- Optimum parameters
- Wound healing applications

Engineering main heading:

- Nanocomposite films

Funding details

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Universitas Diponegoro		UNDIP

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LIST OF SPEAKER

I. Keynote Speaker

No.	Name	Research Field	Institution	Country
1.	Prof. Emmanuel Cornillot	Biotechnology	Universite de Montpellier	Perancis
2.	Prof. Dr. Baba Musta	Geochemistry	Faculty of Science, UMS	Malaysia
3.	Prof. Dr. Ir. Rokhmin Dahuri, MS.	Marine Resource and Environmental Studies	President of Indonesian Aquaculture Society; Proffesor in Marine Resource and Environmental Studies	Indonesia
4.	Sapto P. Putro, M.Si., Ph.D.	Marine Ecology and Aquaculture	Faculty of Science and Mathematics, Diponegoro University	Indonesia

II. Invited Speaker

No.	Name	Department	Institution	Country
1.	Dinar Mutiara Kusumo Nugraheni, S.T., M.InfoTech.(Comp).	Computer Science	FSM UNDIP	Indonesia
2.	Dr. Eng. Ali Khumaeni, S.Si., MS	Physics	FSM UNDIP	Indonesia
3.	Dr. M. Cholid Djunaidi, M.Si.	Chemistry	FSM UNDIP	Indonesia
4.	Dr. Lilih Khotimperwati, S.Si., M.Si.	Biology	FSM UNDIP	Indonesia
5.	Dr. Tarno, M.Si.	Chemistry	FSM UNDIP	Indonesia
6.	Farikhin, M.Sc. Ph.D.	Mathematics	FSM UNDIP	Indonesia

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**Faculty of Sciences and Mathematics
Diponegoro University**



9th ISNPiNSA

International Seminar on New Paradigma and
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CONTRIBUTION OF SCIENCE TOWARD INDUSTRY 4.0 ERA

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October 22, 2019

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The 9th iSNPiNSA

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Hoax news validation using similarity algorithms

S Y Yuliani^{1,2}, S Sahib², M F Abdollah², Y S Wijaya, N H M Yusoff

¹Information Security and Networking Research Group (InFORSNET), Faculty of Information Communication Technology, Universiti Teknikal Malaysia Melaka Malaka, **Malaysia**

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Abstract. News that is presented every day on social media dramatically affects the feelings, feelings, thoughts, or even actions of a person or group. Hoax News is one of them which is disturbing the public and raising noise in various fields, ranging from politics, culture, security, and order, to the economy. Inseparable from social media users. How every day, there is information on social media, which is not necessarily true so that people are provoked by hoax on social media. The news detection system in this study was designed using Unsupported Learning so that it does not require data training. The system was built using the Equation algorithm to calculate the validity of document similarity. Extraction results used to search for content related to user input using a detection engine, then the similarity value and the time needed to utilize hoax news are calculated. System validation testing by using a four text similarity algorithm called the Equation algorithm, the Levenshtein algorithm, the Smith-Waterman algorithm, the Damerau Levenshtein algorithm; this algorithm is used to find the best analytical solution of news hoaxes and submissions needed to find the news hoax password. The final results of the deception detection research using a script that has been done for Validation using an algorithm, get the value of accuracy in detection using the Smith-Waterman algorithm, which produces an accuracy value of text similarity of 99.29% and can be used a process of 6, 57 seconds, followed by the second sequence that is the similarity algorithm produces an accuracy of 75% and requires a processing time of 4.94 seconds, then the third sequence is the Levenshtein algorithm with an accuracy of 55.02% and requires a processing time of 5.49 seconds, and is used today is Damerau Levenshtein algorithm is 55.02% and requires a processing time of 7.54%. The results of research tests on this text can conclude the more text on the detection engine, the higher the verification value and the higher the time needed to process hoax news.

1. Introduction

Sharing information is a positive thing, but not all information disseminated through social media is in the form of facts. There have been various cases of spreading the news that is not facts or often called hoaxes. Whereas hoax is critical information that misleads human perception by spreading false information but considered as valid, No wonder then the intensity of fake news and hoax news on social media is so viral on social media [1]. For personal and group benefit by spreading harmful content that caused unrest and mutual suspicion in the community [2]. The ease and speed of dissemination on social media make this hoax news known to many people in a relatively short period, and can to more people.



Isolation and identification of rare actinomycete-like bacteria from soil-based on 16S ribosomal RNA gene sequences

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Abstract. The rare actinomycete-like bacteria are mycelium-forming bacteria other than phylum *Actinobacteria* that difficult to isolate and cultivate. This group of bacteria was recently speculated by many scientists as a potential new microbial resource for the discovery of novel compounds, as a substitute for actinomycetes. In this study, we isolate and identify rare actinomycete-like bacteria from forest soil collected under bamboo trees, near the Cisolok Geysers, Sukabumi, Indonesia. The isolation of bacteria was performed using Reasoner's 2A (1:10 dilution) medium with 2% gellan gum instead of agar and incubated at 30 °C for three weeks. The 16S rRNA gene sequences of the isolates were examined to determine their taxonomic position. Four isolates designated K17-1, K17-2, K42, and K44 showed pale oranges colonies and formed mycelia were obtained. The results of 16S rRNA gene sequences of these isolates showed high similarity to members of the genus *Dictyobacter* in the family *Dictyobacteraceae* of the class *Ktedonobacteria* of the phylum *Chloroflexi*, with values 97.16-98.02%, and most closely related to the species *Dictyobacter aurantiacus* S-27^T (97.16-98.02% similarities). This result suggested that the member of the class *Ktedonobacteria*, which considered as rare actinomycete-like bacteria, such as *Dictyobacter* could be found in the forest soil of the geothermal area.

1. Introduction

Actinobacteria are gram-positive bacteria that have a high percentage of guanine and cytosine in their genome [1]. This group morphologically comprises unicellular organisms to mycelium-forming bacteria which called Actinomycetes [1,2]. However, bacteria that have filamentous appearance also could be found in the phylum *Chloroflexi*. The member of this phylum which has actinomycete-like morphology is present in the four different class namely *Chloroflexi*, *Anaerolineae*, *Caldilineae* and *Ktedonobacteria* [3]. Among these class, *Ktedonobacteria* has some obvious morphological features which distinguish themselves from others. The member of *Ktedonobacteria* are aerobic organism and forming branched mycelia with spores like actinomycetes [3,4]. Moreover, most validly published strains of *Ktedonobacteria* budding their multiple spores per cell on the aerial mycelium which unique among bacteria [5]. All of *Ktedonobacteria* identified as gram-positive bacteria while almost of the member in phylum *Chloroflexi* were gram-negative [3,6]. Based on these exceptional characters, class *Ktedonobacteria* could be included as the rare actinomycete-like bacteria.

Rare actinomycete-like bacteria could provide an alternative for the discovery of new compounds derived from microorganisms because spore formation usually would be followed by the production of secondary metabolites [7,8]. Further analysis of the genomic of nine members of rare actinomycete-like bacteria



Subsurface mapping of University Diponegoro Tembalang campus based on resistivity data

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Abstract. Subsurface mapping using the geoelectric method has been carried out in the area of Undip Campus, Tembalang to determine the distribution of subsurface layers resistivity. This study employs the Wenner configuration geoelectric method. Data were collected at seven points with a track length of 100 meters and a distance among electrodes of 5 meters. Data processing is carried out using RES2DINV software packages that produce rock resistivity values and depth estimates, then the interpretation of each track is carried out in detail by taking into account the geological information available in the Undip campus, Tembalang. The results of the interpretation show that the study area is dominated by breccias which are Kaligetas formations. The breccia rocks themselves are claystone which tends to be water-resistant and there is also sandstone. Nearly every data collection point has the same cross-section. Claystone with resistivity ranges from 3.05 Ωm to 26.5 Ωm . Sandstones with resistivity range from 20.0 Ωm to 135 Ωm . The rest found alluvium and sand with a resistivity of almost more than 100 μm .

1. Introduction

Diponegoro University was located in Tembalang District, Semarang is one of the best public universities in Indonesia. Construction of infrastructure facilities on campus is continuously carried out to support the learning process and the progress of Diponegoro University. Development activities include the construction of: reservoirs, parking buildings, lecture buildings, sports facilities, irrigation, final disposal, etc. The development requires the preparation of land and carrying capacity of the region. Integrated mapping is needed not only on the surface but also on the subsurface is very important. So in this study, we focus on mapping the subsurface conditions based on the distribution of resistivity values using resistivity geoelectric method. The principle of resistivity geoelectrical method is injection the current through the subsurface to obtain the potential value of the rocks and to get resistance value [1][2][3]. Wenner configuration selection is preferred for mapping with shallow depth. Furthermore, Sudarsono 1984, revealed the need to study the characteristics of the land and its functions so that they could predict what to do when loading occurred on the land.

The results of the mapping are expected to provide information about soil conditions including soil layers, soil structure, soil conditions, bedrock depth, stability. The information obtained will be used as a reference for the next infrastructure work.

