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HASIL PENILAIAN SEJAWAT SEBIDANG ATAU PEER REVIEW
KARYA ILMIAH : PROSIDING

Judul Jurnal Ilmiah (Artikel) : Comparison between corona and dielectric barrier discharges plasma using of pin to single and dual ring electrodes configuration

Nama/ Jumlah Penulis : 5 Orang

Status Pengusul : Penulis pertama/ ~~Penulis ke-~~ Penulis Korespondensi **

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- b. Nomor ISSN : Online ISSN: 1757-899X, Print ISSN: 1757-8981
- c. Vol, No., Bln Thn : Vol.434, No.012024, 12 September 2018
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- f. Alamat web prosiding : <https://iopscience.iop.org/journal/1757-899X>
- Alamat Artikel : <https://iopscience.iop.org/article/10.1088/1757-899X/434/1/012024/meta>
- g. Terindex : Scopus, SJR, Google Scholar, H-index : 48, Impact score : 0.48 (2020)

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	Reviewer I	Reviewer II	
a. Kelengkapan unsur isi jurnal (10%)	2,50	3	2,75
b. Ruang lingkup dan kedalaman pembahasan (30%)	7,00	8	7,5
c. Kecukupan dan kemutakhiran data/informasi dan metodologi (30%)	6,50	8	7,25
d. Kelengkapan unsur dan kualitas penerbit (30%)	7,00	8	7,5
Total = (100%)	23,00	27	25
Nilai untuk Pengusul : 60% x 25 = 15			

Reviewer 1



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Semarang, 10 Februari 2023

Reviewer 2



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	Internasional ☒	Nasional ☐	
a. Kelengkapan unsur isi jurnal (10%)	2,5		2,50
b. Ruang lingkup dan kedalaman pembahasan (30%)	7,5		7,00
c. Kecukupan dan kemutakhiran data/informasi dan metodologi (30%)	7,5		6,50
d. Kelengkapan unsur dan kualitas terbitan/prosiding (30%)	7,5		7,00
Total = (100%)	25		23,00
Nilai Pengusul = 60% x 23,00 = 13,80			

Catatan Penilaian artikel oleh Reviewer :

1. Kelengkapan unsur isi prosiding:

Penulisan artikel sudah baik dan mengikuti standard penulisan artikel di prosiding, yaitu Abstrak, Introduction, Method, Result and Discussion, Conclusions, and References. Tidak ada Acknowledgement. Substansi artikel sesuai bidang ilmu pengusul

2. Ruang lingkup dan kedalaman pembahasan:

Lingkup bahasan dari artikel ini adalah bidang fisika. Pembahasan cukup baik yaitu plasma corona discharge dan plasma dielectric barrier Discharges (DBD) dengan polaritas positif menggunakan konfigurasi pin to single dan dual ring elektroda telah dilakukan. Kedua pembangkit plasma lucutan yang digunakan dalam penelitian ini dibentuk oleh stainless steel, elektroda pin sebagai anoda dan elektroda cincin sebagai katoda. Kedalaman pembahasan baik.

3. Kecukupan dan kemutakhiran data/informasi dan metodologi:

Informasi yang disajikan cukup baru dan hasil yang diperoleh memuat substansi orisinil dengan aspek aplikasi yang penting. Sumber gagasan penulis untuk artikel ini cukup komprehensif. Dari 12 referensi yang dipakai tidak terdapat paper yang lebih dari 10 tahun terakhir (out of date). Metodologinya dan penulisannya cukup terstruktur.

4. Kelengkapan unsur dan kualitas terbitan:

Artikel dimuat di prosiding IOP Conf. Series: Materials Science and Engineering (AASEC 2018). pada Vol.434, No.012024, 12 September 2018 diterbitkan IOP Publishing Ltd. coverage discontinued in Scopus

Semarang, 10 Februari 2023

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Komponen Yang Dinilai	Nilai Maksimal Prosiding		Nilai Akhir Yang Diperoleh
	Internasional ☒	Nasional ☐	
a. Kelengkapan unsur isi jurnal (10%)	3		3
b. Ruang lingkup dan kedalaman pembahasan (30%)	9		8
c. Kecukupan dan kemutakhiran data/informasi dan metodologi (30%)	9		8
d. Kelengkapan unsur dan kualitas terbitan/prosiding (30%)	9		8
Total = (100%)	30		27
Nilai Pengusul = 60% x 27 = 16,2 (Max 30)			

Catatan Penilaian artikel oleh Reviewer :

1. Kesesuaian dan kelengkapan unsur isi jurnal:

Tulisan sudah lengkap yang terdiri dari title, abstract, introduction, method, result and discussion, conclusion, references. Kebaruan juga telah dijelaskan. Artikel telah sesuai dengan bidang ilmu pengusul/anggota penulis.

2. Ruang lingkup dan kedalaman pembahasan:

Pembahasan artikel terkait membandingkan antara corona and dielectric barrier discharges plasma menggunakan konfigurasi elektroda pin tunggal dan dual ring cukup dalam. Artikel ini juga dilengkapi dengan referensi pada bagian pembahasan untuk menguatkan diskusi.

3. Kecukupan dan kemutakhiran data/informasi dan metodologi:

Metode standar serta referensi yang digunakan cukup baik. Makalah didukung oleh 12 daftar Pustaka.

4. Kelengkapan unsur dan kualitas terbitan:

Prosiding untuk artikel yang diterbitkan telah terindex dan memiliki kualitas internasional. Kelengkapan dan kualitas cukup baik terdapat gambar untuk memudahkan penjelasan.

Semarang, 10 Februari 2023

Reviewer 2



Prof. Dr. Agus Subagio, S.Si., M.Si.

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Comparison between corona and dielectric barrier discharges plasma using of pin to single and dual ring electrodes configuration

Sumariyah S.^{a, b} ; Hanafi I.^a; Muchisin Z.^{a, b}; Arianto F.^{a, b}; Nur M.^{a, b}

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^b Center for Plasma Research, Diponegoro University, Semarang, Indonesia

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Abstract

Research on one of the study plasma corona discharge and plasma dielectric barrier discharges (DBD) with positive polarity using the configuration of pin to single and dual ring electrodes has been done. The both discharge plasma generator used in this study was formed by stainless steel, pin electrodes as anodes and ring electrodes as cathodes. The diameter of pin was 0.1 mm and diameter outside of single ring was 2.60 cm and inside 2.40 cm. For dual ring, we install other ring inside the big ring (with diameter outside was 2.60 cm). The second ring, outside diameter was 2.00 cm and inside diameter was 1.80 cm. Barrier of DBD reactor was made by dielectric material of glass with thickness of 3 mm with an area that can cover all ring electrodes. Characterization of the corona discharge plasma and the DBD Plasma were used to locate the respective working areas of the reactor. Variations of voltage used from 0 kV to arc with specified intervals of 0.2 kV, with variations of distance between electrodes were from 0.5 cm to 2.0 cm with intervals 0.5 cm. The result of I-V characterization shows the current produced

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ISBN: 978-051154607-5; 978-052184735-3
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A S M Al-Obaidi¹ and T NguyenHuynh¹

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Abstract

Fossil fuel is no longer a reliable source to meet an increasing energy demand and guarantee a sustainable world in the future. This is because of its known environmental effects linked to climate change, global warming, and severe pollution. The current situation of harnessing energy requires to adjust for the integration of renewable energy into transportation and electricity generation for sustainable development. Throughout the literature, two main trends in energy technology are recognized. One is continuing to use petroleum-based fuel, but with less and wise fuel consumption, increased efficiency of the engines of vehicles and electricity generators, and decarbonizing carbon in the exhaust. Second is technology development in green energy from renewable sources such as sun, wind, and hydropower to reduce in construction and production costs and lessen their environmental effects. This paper firstly presents an overview on green technology in the past and