

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

Judul Jurnal Ilmiah (Artikel) : DDBD ozone plasma reactor generation: the proper dose for medical applications  
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 Alamat Artikel : <https://iopscience.iop.org/article/10.1088/1742-6596/1217/1/012026>  
 g. Terindex : Scopus, SJR, Google Scholar, H-index : 85, Impact score : 0.48 (2021-2020)

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Prof. Dr. Kusworo Adi, S.Si., M.T.  
 NIP. 197203171998021001  
 Unit Kerja : Fisika/FSM/UNDIP  
 Bidang Ilmu: Fisika Instrumentasi

Semarang, 10 Februari 2023

Reviewer 2

Prof. Dr. Agus Subagio, S.Si., M.Si.  
 NIP. 19710813 1995121001  
 Unit Kerja : Fisika/FSM/UNDIP  
 Bidang Ilmu: Fisika Material

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Reviewer 1



Prof. Dr. Kusworo Adi, S.Si., M.T.

NIP. 197203171998021001

Unit Kerja : Fisika/FSM/UNDIP

Bidang Ilmu: Fisika Instrumentasi

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- Ruang lingkup dan kedalaman pembahasan:**  
Pembahasan artikel terkait studi reaktor plasma ozon DDBD dengan kajian dosis untuk aplikasi medis. Artikel ini juga dilengkapi dengan referensi pada bagian pembahasan untuk menguatkan diskusi.
- Kecukupan dan kemutakhiran data/informasi dan metodologi:**  
Metode standar serta referensi yang digunakan cukup baik terkait setting eksperimen. Makalah didukung oleh 16 daftar pustaka.
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Semarang, 10 Februari 2023

Reviewer 2



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

NIP. 19710813 1995121001

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## DDBD ozone plasma reactor generation: The proper dose for medical applications

[Azam M.<sup>a</sup>](#) ; [Restiwijaya M.<sup>b</sup>](#); [Zain A.Z.<sup>a,b</sup>](#); [Sumariyah S.<sup>a,b</sup>](#); [Setiawati E.<sup>a</sup>](#); [Richardina V.<sup>a</sup>](#); [Hendriani A.R.<sup>c</sup>](#); [Dayana B.<sup>c</sup>](#); [Kinandana A.W.<sup>b</sup>](#); [Arianto F.<sup>a,b</sup>](#); [Bintang K.N.<sup>a</sup>](#); [Putri Y.<sup>a</sup>](#)

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<sup>a</sup> Physics Department, Faculty of Science and Mathematics, Diponegoro University, Semarang, Indonesia

<sup>b</sup> Center for Plasma Research, Faculty of Science and Mathematics, Diponegoro University, Semarang, Indonesia

<sup>c</sup> Medical Faculty of Diponegoro University, Semarang, Indonesia

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**Abstract**

Double Dielectric Barrier Discharge (DDBD) ozone plasma reactor generation are presented in this paper. The generation of this reactor generates ozone concentration which can be arranged upon the proper dose for medical applications. AC high voltage is applied to the range of 0-3 kV and the frequency of 50 Hz. Pure oxygen gas was piped into the DDBD reactor with flow rate variations of 2, 4 and 6 L/min. The results showed that current as a function of voltage where the current is increased with the increasing of voltage. Ozone productivity is shown by the significant increase of current.

**Cited by 2 documents**

Effect of distance tip gap on screw electrode of ozone generator: simulation and experimental study

Amri, D. , Fitria, S. , Jambak, M.I. (2022) *Telkonnika (Telecommunication Computing Electronics and Control)*

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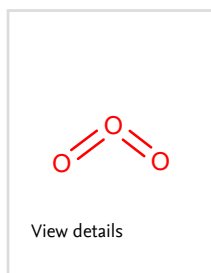
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Ozone concentration is increasing as the increase of the voltage provided, but rather the concentration of ozone is decreasing as the increasing of flow rate. The Ozone capacity is affected by ozone concentration and flow rate, and can be used to determine the ozone dose. The proper dose of ozone can be ozone therapy for various kinds of diseases. © Published under licence by IOP Publishing Ltd.

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👤 Azam, M.; Physics Department, Faculty of Science and Mathematics, Diponegoro University, Semarang, Indonesia; email: [azam@fisika.undip.ac.id](mailto:azam@fisika.undip.ac.id)  
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Tangerang Selatan 15314,

### Indonesia

Keisuke Takahashi (Keisuke.takahashi@eng.hokudai.ac.jp)

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North 13, West 8

Sapporo, 060-8628

### Japan

Peng Han (hanpeng407@gmail.com)

Institute of Statistical Mathematics

Risk Analysis Research Center (Statistical Seismological Research Project)

10-3 Midori-cho, Tachikawa

Tokyo 190-8562

Japan

Siwei Chen (chen-sw@criepi.denken.or.jp)

Central Research Institute of Electric Power Industry

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2-11-1 Iwadokita, Komae-shi

Tokyo 201-8511

Japan

Xinhong Qiu (qxinhong@gmail.com)

Wuhan Institute of Technology

School of chemistry environmental engineering

No.693, Xiongchu Avenue, Hongshan District Wuhan, Hubei Province, P.R.

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Mohsen Farahat (mohsen105@hotmail.com)

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P.O. Box 87 Helwan, Cairo

Egypt

Young-Ho Ko (yhko@etri.re.kr)

Electronic and Telecommunications Research Institute (ETRI)

Photonic/Wireless Convergence Components Research Department

218 Gajeong-ro, Yuseong-gu, Daejeon, 34129

Korea

Eni Sugiarti (eni.sugiarti@lipi.go.id)

Indonesian Institute of Sciences (LIPI)

Research Center for Physics

Komplek PUSPIPTEK Serpong,

Tangerang Selatan 15314,

Indonesia

Titi Anggono (titi.anggono@lipi.go.id)

Indonesian Institute of Sciences (LIPI)

Research Center for Physics

Komplek PUSPIPTEK Serpong,

Tangerang Selatan 15314,

Indonesia

Isnaeni (isnaeni@lipi.go.id)

Indonesian Institute of Sciences (LIPI)

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PAPER • OPEN ACCESS

# Growth and fabrication of 850 nm AlGaAs/GaAs vertical cavity surface emitting laser structure

N I Cabello<sup>1</sup>, P M Tingzon<sup>1</sup>, H A Husay<sup>1</sup>, J D Vasquez<sup>1</sup>, R Jagus<sup>1</sup>, K L Patrocenio<sup>1</sup>, K C Gonzales<sup>1</sup>, G A Catindig<sup>1</sup>, E A Prieto<sup>1</sup>, A Somintac<sup>1</sup> [+ Show full author list](#)

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[ncabello@nip.upd.edu.ph](mailto:ncabello@nip.upd.edu.ph)

<sup>1</sup> National Institute of Physics, College of Science, University of the Philippines NIP Bldg, National Science Complex, Diliman, Quezon City **1101, Philippines**

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## Abstract

In this work, we demonstrate the NIP's all in-house development of a vertical cavity surface emitting laser structure. The VCSEL structure grown via MBE consists of an AlAs/AlGaAs distributed Bragg reflector and an AlGaAs/GaAs quantum well designed to issue at the 850 nm region. Reflectance spectroscopy showed that the stop band is centered around the designed wavelength. The electroluminescence spectra displayed that the maximum light emission corresponded to its design. This is a crucial step in the NIP's development of semiconductor lasers, leading towards future high-speed and highly-tunable VCSEL devices.

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# An investigation of a CT noise reduction using a modified of wiener filtering-edge detection

C Anam<sup>1</sup>, T Fujibuchi<sup>2</sup>, T Toyoda<sup>2</sup>, N Sato<sup>2</sup>, F Haryanto<sup>3</sup>, R Widita<sup>3</sup>, I Arif<sup>3</sup> and G Dougherty<sup>4</sup>

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<sup>1</sup> Department of Physics, Faculty of Mathematics and Natural Sciences, Diponegoro University, Jl. Prof. Soedarto SH, Tembalang, Semarang 50275, Indonesia.

<sup>2</sup> Department of Health Sciences, Faculty of Medical Sciences, Kyushu University, 3-1-1 Maidashi, Higashi-ku, Fukuoka 812-8582, Japan.

<sup>3</sup> Department of Physics, Faculty of Mathematics and Natural Sciences, Bandung Institute of Technology, Ganesha 10, Bandung 40132, Indonesia.

<sup>4</sup> Applied Physics and Medical Imaging, California State University Channel Islands, Camarillo, CA 93012, USA.

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## Abstract

The aims of this study were to investigate the noise reduction in a CT image using a modified Wiener filtering-edge detection method. We modified the noise reduction algorithm of a combination of the Wiener filter and edge detection by addition of a dilation stage after edge detection. We then evaluated kernel size of the Wiener filter, threshold values in the edge detection, and size of structuring elements in the dilation process. Images of adult anthropomorphic and self-

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