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HASIL PENILAIAN SEJAWAT SEBIDANG ATAU PEER REVIEW
KARYA ILMIAH : PROSIDING

Judul Karya Ilmiah (Prosiding) : Synthesis of Cu₂ O from modified Fehling reaction for the preparation of Cu₂ O thin film photocathode by using the spin coating method, characterization, and its photoelectrochemical properties

Nama/ Jumlah Penulis : Didik Setiyo Widodo/5 orang

Status Pengusul : Penulis ke-5

Identitas Prosiding :

- a. Judul Prosiding : Journal of Physics: Conference Series
- b. ISBN/ISSN : 17426588
- c. Thn Terbit, Tempat Pelaks. : Juli 2021, Virtual, Online24 September 2020 through 25 September 2020
- d. Penerbit/Organiser : Institute of Physics Publishing
- e. Alamat Repository/Web : <https://iopscience.iop.org/journal/1742-6596>
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- Ruang lingkup dan kedalaman pembahasan:**
Makalah ini berisi tentang ide penggantian bahan bakar fosil menggunakan bahan bakar hydrogen yang dibuat dengan cara water splitting dengan cara potokimia dengan bantuan semi konduktor. Semi konduktor yang dipergunakan adalah Cu₂O yang dibuat dari Cu dan asam sitrat, hasilnya berupa padatan yang diuji dengan SEM-EDX dan XRD, serta diuji sebagai potokatoda
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Semarang, Juli 2022
Reviewer I



Dr. Rahmad Nuryanto, S.Si., M.Si.
NIP. 197105211998021001
Unit Kerja :FSM Universitas Diponegoro
Bidang Ilmu: Kimia Fisik

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HASIL PENILAIAN SEJAWAT SEBIDANG ATAU PEER REVIEW
KARYA ILMIAH : PROSIDING

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Total = (100%)			27,4
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 Reviewer II

Khabibi, S.Si., M.Si.
 NIP. 197305221998021001
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Synthesis of Cu₂O from modified Fehling reaction for the preparation of Cu₂O thin film photocathode by using the spin coating method, characterization, and its photoelectrochemical properties

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Abstract

Hydrogen energy has the potency as a renewable energy source to replace the fossil energy. It can be obtained through the process of photoelectrochemical (PEC) water splitting with the help of a semiconductor as a photocathode to capture photon energy. One of the copper-based metal oxide semiconductors that can be used in the water splitting process is copper(I) oxide (Cu₂O), because it has non-toxic advantage, requires an easy synthesis process, low production cost, and has a low band gap

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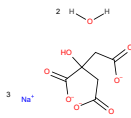
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(2–2.45 eV). This study aims to determine the effect of Fehling's modification using citrate in Cu₂O synthesis as material to prepare Cu₂O thin film photocathode using spin-coating method. The prepared photocathode consists of three stages, namely variations of Cu₂O synthesis with mole ratios of copper: citrate of 1:1; 1:2; 1:4, thin film preparation and heating. Then the obtained thin film was characterized using SEM, EDX and XRD. J-V curves of the photocathodes gave current densities, onset potential and applied bias to photon efficiency (ABPE) for Cu₂O thin film photocathode prepared by copper: citrate mole ratios of 1:1; 1:2; 1:4 namely 0.09; 0.18; 0.12 mA/cm² at potential of 0.2 V (vs. RHE), 0.04; 0.08; 0.02 V (vs. RHE), and 0.062, 0.057, 0.058 %, respectively. SEM analysis result showed a spherical morphology of Cu₂O. EDX analysis showed that the sample contained copper and oxygen with 78% Cu and 22% O. XRD analysis results showed the presence of Cu₂O with an average crystal grain size of 38.08 nm. © Published under licence by IOP Publishing Ltd.

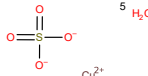
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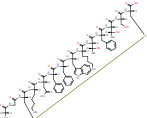
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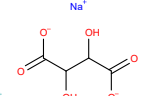
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- ☐ 1 Septina, W., Prabhakar, R.R., Wick, R., Moehl, T., Tilley, S.D.
Stabilized Solar Hydrogen Production with CuO/CdS
Heterojunction Thin Film Photocathodes

(2017) *Chemistry of Materials*, 29 (4), pp. 1735-1743. Cited 109 times.
<http://pubs.acs.org/journal/cmatex>
doi: 10.1021/acs.chemmater.6b05248

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- ☐ 2 Chen, Z, Dinh, H N, Miller, E
(2013) *Photoelectrochemical Water Splitting SpringerBriefs in Energy*. Cited 471 times.
(London: Springer)

- ☐ 3 Zhang, Z., Zhang, S., Liu, S., Wang, M., Fu, G., He, L., Yang, Y., (...), Fang, S.
Electrochemical aptasensor based on one-step synthesis of $\text{Cu}_2\text{O}@$ aptamer nanospheres for sensitive thrombin detection
(2015) *Sensors and Actuators, B: Chemical*, 220, art. no. 18530, pp. 184-191. Cited 18 times.
<https://www-journals-elsevier-com.proxy.undip.ac.id/sensors-and-actuators-b-chemical>
doi: 10.1016/j.snb.2015.05.089
View at Publisher
-
- ☐ 4 Tamirat, A.G., Rick, J., Dubale, A.A., Su, W.-N., Hwang, B.-J.
Using hematite for photoelectrochemical water splitting: A review of current progress and challenges
(2016) *Nanoscale Horizons*, 1 (4), pp. 243-267. Cited 458 times.
<http://www.rsc.org/journals-books-databases/about-journals/nanoscale-horizons/?id=8277>
doi: 10.1039/c5nh00098j
View at Publisher
-
- ☐ 5 Serin, N., Serin, T., Horzum, Ş., Çelik, Y.
Annealing effects on the properties of copper oxide thin films prepared by chemical deposition
(2005) *Semiconductor Science and Technology*, 20 (5), pp. 398-401. Cited 179 times.
doi: 10.1088/0268-1242/20/5/012
View at Publisher
-
- ☐ 6 Ma, Q.-B., Hofmann, J.P., Litke, A., Hensen, E.J.M.
 Cu_2O photoelectrodes for solar water splitting: Tuning photoelectrochemical performance by controlled faceting
(2015) *Solar Energy Materials and Solar Cells*, 141, pp. 178-186. Cited 55 times.
<http://www.sciencedirect.com.proxy.undip.ac.id:2048/science/journal/09270248/100>
doi: 10.1016/j.solmat.2015.05.025
View at Publisher
-
- ☐ 7 Kooti, M, Matour, L
(2010) *IEE Trans. Nanotechnol*, 17, p. 1. Cited 2 times.
-
- ☐ 8 Bi, J., Wu, S., Xia, H., Li, L., Zhang, S.
Synthesis of monodisperse single-crystal Cu_2O spheres and their application in generating structural colors
(2019) *Journal of Materials Chemistry C*, 7 (15), pp. 4551-4558. Cited 12 times.
<http://pubs.rsc.org/en/journals/journal/tc>
doi: 10.1039/c9tc00809h
View at Publisher

- 9 Asthana, S., Samanta, C., Voolapalli, R.K., Saha, B.
Direct conversion of syngas to DME: synthesis of new Cu-based hybrid catalysts using Fehling's solution, elimination of the calcination step
(2017) *Journal of Materials Chemistry A*, 5 (6), pp. 2649-2663. Cited 22 times.
<http://pubs.rsc.org/en/journals/journalissues/ta>
doi: 10.1039/c6ta09038a
View at Publisher

- 10 Parry, R.W., DuBois, F.W.
Citrate Complexes of Copper in Acid Solutions
(1952) *Journal of the American Chemical Society*, 74 (15), pp. 3749-3753. Cited 30 times.
doi: 10.1021/ja01135a010
View at Publisher

- 11 Feng, L., Zhang, C., Gao, G., Cui, D.
Facile synthesis of hollow Cu₂O octahedral and spherical nanocrystals and their morphology-dependent photocatalytic properties (Open Access)
(2012) *Nanoscale Research Letters*, 7, art. no. 276. Cited 73 times.
<http://www.springer.com.proxy.undip.ac.id:2048/materials/nanotechnology/journal/11671>
doi: 10.1186/1556-276X-7-276
View at Publisher

- 12 Chen, Z., Jaramillo, T.F., Deutsch, T.G., Kleiman-Shwarscstein, A., Forman, A.J., Gaillard, N., Garland, R., (...), Dinh, H.N.
Accelerating materials development for photoelectrochemical hydrogen production: Standards for methods, definitions, and reporting protocols
(2010) *Journal of Materials Research*, 25 (1), pp. 3-16. Cited 866 times.
doi: 10.1557/jmr.2010.0020
View at Publisher

- 13 Nurosyid, F, Purnama, B, Ayuni, L A
(2008) *Jurnal Ilmu Dasar*, 9, pp. 9-14.

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Welcoming the 32nd Anniversary of the Faculty of Science and Mathematics and the 63rd Anniversary of Diponegoro University, the Faculty of Science and Mathematics of Diponegoro University held an international conference entitled A Web Conference The 10th International Seminar on New Paradigm and Innovation on Natural Sciences and its Application (ISNPINSA) . This year's Undip FSM annual conference was held on 24-25 September 2020 with the theme "DEVELOPING INNOVATIONS AND CHALLENGES IN SCIENCE AND TECHNOLOGY FOR BETTER LIVING". The keynote speaker in this event was Prof. Hidetaka Arimura Ph.D from Kyushu University Japan, Prof. Dr. Khairil Anwar Notodiputro from the Bogor Agricultural Institute, Prof. Wenny Rahayu from La Trobe University, Australia, Prof. Ming-Chien Su from National Dong Hwa University Taiwan, Jirawat Yongsawatdigul, PhD. from Suranaree University of Technology Thailand, Prof. Dr. Toshioh Fujibuchi from Kyushu University Japan and Prof. Dr. Tri Retnaningsih Soeprbowati, M.App.Sc. from Diponegoro University.

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Table of contents

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Investigation of a method for creating neonatal chest phantom using 3D printer

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Abstract. Newborns and children are more sensitive to radiation and have a longer life expectancy than adults. Therefore, efforts should be made to reduce unnecessary exposure by optimizing the dose when conducting radiological examinations. In order to optimize the dose in neonatal X-ray examinations, we studied a method to create inexpensive and precise neonatal chest heterogeneous anthropomorphic phantoms using a 3 dimensional (3D) printer. Phantoms were created by constructing segments of computed tomography (CT) volume data acquired from the chest of a 6-month-old, excluding the bone and lung tissue, using 3D image analysis software. The material used for 3D printing was polylactic acid; multiple printing densities were investigated. Gypsum and urethane foam were used as bone- and lung-equivalent substances. The CT values of the lung tissue in the phantom were almost the same as those of the air, and those of the bone tissue showed a range of CT values dependent on the print density. By visual evaluation, it was established that the shapes of the original lungs and heart were reproduced in the images of the phantom. The creation of an inexpensive and precise neonatal chest phantom using a 3D printer is useful.

1. Introduction

Radiology is widely used as the basis of medical diagnosis and treatment because of its usefulness. However, strict control is required to minimize ionizing radiation exposure and the related risks. If the radiation dose is too low, disease may be difficult to diagnose and therapeutic effects may be reduced. Moreover, too high a dose may not only impair proper diagnosis and treatment but also causes unnecessary exposure. The International Commission on Radiological Protection (ICRP) recommends the justification and optimization of radiation diagnostics [1]. In addition, the use of diagnostic reference levels (DRLs) as guidelines for patient dose is recommended to promote protection in radiology [2]. A DRL indicates a particular radiation dose in a standard-type radiological examination that serves as a guide for the standardization of imaging conditions at individual facilities. DRLs are set worldwide [3-6].

While efforts are being made to reduce medical radiation exposure in general, this is especially true for newborn and infant exposure. Very young children are more radiosensitive than adults and have a longer life expectancy, which inevitably increases the risk of carcinogenesis. Thus, infant and newborn radiation exposure requires more attention than that of adults. Regarding data on medical exposure, various measured values, estimated values, and indicators have been published in the literature, but there is perhaps insufficient information on general radiography, fluoroscopic examination, and computed tomography (CT) examination of newborns and infants [7-15]. Human body phantoms for newborns and infants are commercially available for radiographic practice. However, dosimeters cannot be



Convolution properties of bounded analytic function classes with higher and complex order defined by q - derivatives operator

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Abstract. We first present two classes $\zeta_q^n(\alpha, \eta)$ and $\mathfrak{S}_q^n(\alpha, \eta)$ of complex order bounded q -starlike and q -convex univalent functions using the salagean q -derivative operator $D_q^n f(z)$ that is defined in $\nabla = \{z \in \mathbb{C} : |z| < 1\}$. In such classes, we also analyze the convolution properties, inclusion properties, and estimates of coefficients.

1. Introduction

Let $\mathbf{A}$ be the class of analytic functions defined in the open unit disk $\nabla = \{z \in \mathbb{C} : |z| < 1\}$ is of the type

$$\mathcal{G}(z) = z + \sum_{k=2}^{\infty} v_k z^k, \quad (1)$$

Let $S^*(\delta)$ and $C(\delta)$ ($0 \leq \delta < 1$) denote the subclasses of $\mathbf{A}$ consisting of the starlike function of order δ and the convex function of the order δ in ∇ respectively [18]. If $\mathcal{G}$ and r are analytic functions in ∇ , we say that $\mathcal{G}$ is subordinate to r , written $\mathcal{G} \prec r$ if there exists a Schwarz function $w = \sum_{k=1}^{\infty} w_k z^k$ and $|w(z)| < 1$ for all $(z \in \nabla)$, such that $\mathcal{G}(z) = r(w(z))$ ($z \in \nabla$). In particular, if the function r is univalent in ∇ , the subordination referred to above is equivalent to $\mathcal{G}(0) = r(0)$ and $\mathcal{G}(\nabla) \subset r(\nabla)$ [4], [12], [13].

Let $\mathcal{G}$ be as in (1.1), and $r(z) = z + \sum_{k=2}^{\infty} c_k z^k$, then the convolution or Hadamard product of $\mathcal{G}$ and r is given by

