DAFTAR PUSTAKA

Ambrosio, F., Witroe, J., & Paquarello, A. (2018). pH-dependent surface chemistry from first principles: Application to the $BiVO_4$ (010)-water interface. *ACS Appl. Mater. Interfaces*. doi:10.1021/acsami.7b16545

Andriana, N. (2016). *Pemanfaatan Silika Gel Berbasis Abu Terbang (Fly Ash) Batubara PLTU Paiton-Probolinggo Sebagai Adsorben Zat Warna Metilen Biru.* Jember: Universitas Jember.

Arumugam, M., & Choi, M. Y. (2019). Effect of Operational Parameters on the Degradation of Methylene Blue Using Visible Light Active $BiVO_4$ Photocatalyst. *Bulletin of The Korean Chemical Society*, 1-6. doi:10.1002/bkcs.11972

Aryanto, A., & Nugraha, I. (2015). Kajian fotodegradasi methyl orange dengan menggunakan komposit TiO_2-montmorillonit. *Jurnal Molekul, 10*(1), 57-65.

Baral, B., Hemalata, K., & Parida, K. M. (2019). Construction of M- $BiVO_4$/T-$BiVO_4$ isotype heterojunction for enhanced photocatalytic degradation of Norfloxacine and Oxygen evolution reaction. *Journal of Colloid and Interface Science, 554*, 278-295. doi:10.1016/j.jcis.2019.07.007

Baunsele, A. B., & Missa, H. (2020). Kajian Kinetika Adsorpsi Metilen Biru Menggunakan Adsorben Sabut Kelapa. *Akat Kimindo, 5*(2), 76-85. doi:10.12962/j25493736.v5i2.7791

Christina, M. (2007). Studi pendahuluan mengenai degradasi zat warna azo (metil orange) dalam pelarut airmenggunakan mesin berkas elektron 350 keV/10 mA. *JFN, 1*(1). doi:ISSN 1978-8738

Effendy. (2010). *Logam, Aloi, Semikonduktor, dan Superkonduktor.* Malang: Bayumedia Publishing.

Fessenden, R. J., & Fessenden, J. S. (1986). *Kimia Organik Jilid 1.* Jakarta: Erlangga.

Figueiredo, A. C. (2016). *Growth of Vanadium Dioxide (VO_2) Nanostructures by Controlling the Hydrothermal Synthesis Parameters.* Lisboa, Portugal: Universidade Nova de Lisboa.

Ganeshbabu, M., Kannan, N., Venkatesh, P., Paulraj, G., & Jeganathan, K. A. (2020). Synthesis and characterization of $BiVO_4$ nanoparticles for environmental applications. *Royal Society of Chemistry, 10*, 18315-18322. doi:10.1039/d0ra01065k

Gaungly, P., Harb, M., Cao, Z., Cavallo, I., Breen, A., & Dervin, S. (2019). 2D nanopmaterials for photocatalytic hydrogen production. *ACS Energy Lett*, 1687-1709.

Gaya. (2014). Heterogeneous photocatalysis using inorganic semiconductor solids. *Springer*.

Guo, M., He, Q., Wang, A., & Wang, W. (2016). A Novel, Simple and GreenWay to Fabricate $BiVO_4$ with Excellent Photocatalytic Activity and Its Methylene Blue Decomposition Mechanism. *Crystals*, *6*(81). doi:10.3390/cryst6070081

Hamdani, D., & Subagiyo, L. (2016). Analisis Eksergi Modul PV Berdasarkan Spektrum Panjang Gelombang Cahaya Matahari. *Seminar Nasional Fisika* (pp. 7-12). Jakarta: Universitas Negeri Jakarta.

Huo, R., Yang, X., Liu, Y., & Xu, Y. (2017). Visible-light photocatalytic degradation of glyphosate over $BiVO_4$ prepared by different co-precipitation methods. *Materials Research Buletin*, *88*, 56-61. doi:10.1016/j.materresbull.2016.12.012

Jiang, H. (2012). Hydrothermal fabrication and visible-light-driven photocatalytic properties of bismuth vanadate with multiple morphologies and/or porous structures for Methyl Orange degradation. *Journal of Environmental Sciences*, *24*(3), 449-457. doi:10.1016/S1001-0742(11)60793-6

Jiang, Z., Liu, Y., Li, M., Jing, T., Huang, B., Zhang, X., Qin, X. (2016). One-pot solvothermal synthesis of $Bi_4V_2O_{11}$ as a new solar water oxidation photocatalyst. *Scientific Reports*. DOI: 10.1038/srep22727

Malathi, A., Madhavan, J., & Ashokkumar, M. (2017). A review on $BiVO_4$ photocatalyst: Activity enhancement methods for solar photocatalytic applications. *Applied Catalysis*. doi:10.1016/j.apcata.2018.02.010

Mandi, H. (2014). $BiVO_4$-*based nanoparticles for visible light photocatalytic applications.* Singapore: Nanyang Technological University. doi:10.32657/10356/59858

Monfort, O., & Plesch, G. (2018). Bismuth vanadate-based semiconductor photocatalysts: a short criticalreview on the efficiency and the mechanism of photodegradation of organic pollutants. *Environmental Science and Pollution Research.*

Naimah, S., Silvie, A., Bumiarto, A., Novi, N. J., & Agustina, A. C. (2014). Degradasi Zat Warna pada Limbah Cair Industri Tekstil dengan Metode

Fotokatalitik menggunakan Nanokomposit TiO_2-Zeolit. *Jurnal Kimia Kemasan*(36), 225-236.

Nguyen, T. D., Cao, V. D., Nguyen, V. H., Nong, L. X., & Luu, T. D. (2018). Synthesized $BiVO_4$ was by the co-precipitation method for Rhodamine B degradation under visible light. *IOP Conf. Series: Materials Science and Engineering*. doi:10.1088/1757-899X/542/1/012058

Nguyen, T. D., Nanda, S., Tran, T. V., Nong, L. X., & Abdullah, B. (2020). $BiVO_4$ photocatalysis design and applications to oxygen production and degradation of organic compounds. *Environmental Chemistry Letters, 18*, 1779-1801. doi:10.1007/s10311-020-01039-0

Ningsih, S. K. (2016). *Sintesis Anorganik.* Padang: UNP Press.

Pingmuang, K., Chen, K., Kangwansupamonkon, W., & Nattestad, A. (2017). Composite Photocatalysts Containing $BiVO_4$ for Degradation of Cationic Dyes. *Scientific Reports, 7*. doi:10.1038/s41598-017-09514-5

Qu, Z., Liu, P., Yang, X., Wang, F., & Zhang, W. (2016). Microstructure and Characteristic of $BiVO_4$ Prepared under Different pH Values: Photocatalytic Efficiency and Antibacterial Activity. *Materials, 9*(129), 1-11. doi:10.3390/ma9030129

Riyani, K., Setyaningtyas, T., & Andreas, R. (2008). Pengolahan Limbah Logam Berat Industri Tekstil Menggunakan Fotokatalis TiO_2/Arang Aktif. *Jurnal Molekul, 3*(1), 40-46.

Rokon, M. D., & Dowla, U. D. (2018). Synthesis of $BiVO_4$-GO-PVDF nanocomposite: An excellent, newly designed material for high photocatalytic activity towards organic dye degradation by tuning band gap energies. *Solid State Science, 80*, 22-30.

Rosyidah, N. (2016). *Sintesis Nanopartikel Zn-AlO dengan Metode Kopresipitasi dan Karakterisasi Sifat Listrik.* Surabaya: Institut Teknologi Sepuluh November.

Setyaningtyas, T., & Riyani, K. (n.d.). Pengolahan Limbah Cair Batik menggunakan Fotokatalis TiO_2-Dopan-N dengan Bantuan Sinar Matahari. *Jurnal Kimia Valensi, 2*(5).

Sleight, S. W., Chen, H., & Ferretti, A. (1979). Crystal growth and structure of $BiVO_4$. *Mater Res Bull, 14*, 1571-1581. doi:10.1016/0025-5408(72)90227 - 9

Suarsa, I. W. (2015). *Spektroskopi.* Bali: FMIPA Universitas Udayana.

Sucahya, T. N. (n.d.). Review: fotokatalis untuk pengolahan limbah cair. *Jurnal Integrasi Proses, 6*(1).

Sulaeman, U., Suhendar, S., Diastuti, H., Riapanitra, A., & Yin, S. (2018). Design of Ag_3PO_4 for highly enhanced photocatalyst using hydroxyapatite as a source of phosphate ion. *Solid State Sciences*, 1-5.

Sulaeman, U., Yin, S., & Sato, T. (2010). Visible ight photocatalytic properties of Ta and N codoped $SrTiO_3$ nanoparticles. *International Journal of Topics*.

Suwanchawalit, C., Buddee, S., & Wongnawa, S. (2017). Triton X-100 induced cuboid-like $BiVO_4$ microsphere with high photocatalytic performance. *J. Environ. Sci, 55*, 257-265.

Swamardika, A. (2009). Pengaruh Radiasi Gelombang Elektromagnetik terhadap Kesehatan Manusia (Suatu Kajian Pustaka). *Jurnal Teknologi Elektro, 8*(1), 106-109.

Tan, G., Zhang, L., Ren, H., Wei, S., Huang, J., & Xia, A. (2013). Effects of pH on the Hierarchical Structures and Photocatalytic Performance of $BiVO_4$ Powders Prepared via the Microwave Hydrothermal Method. *ACS Applied Materials and Interfaces, 5*, 5186-5193. doi:10.1021/am401019m

Teoh, W. Y., Scott, J. A., & Amal, R. (2012). Progress in heterogeneous photocatalysis: from classical radical chemistry to engineering nanomaterials and solar reactors. *J Phys Chem Lett, 3*(5), 629-639.

Tolod, K. R., Hernandez, S., & Russo, N. (2017). Recent advances in the $BiVO_4$ photocatalyst for sun-driven water oxidation: top-performing photoanodes and scale-up challenges. *Catalysts, 13*, 13-16.

Unej. (2017). Spektrofotometri Sinar Tampak (Visible). Retrieved Januari 2, 2022, from https://kimia.fmipa.unej.ac.id/?p=472

Wiranda, A. (2015). *DR-UV.* Padang: Universitas Negeri Padang.

Xygkis, M., Gagaoudakis, E., Zouridi, L., Markaki, O., & Aperathitis, E. (2019). Thermochromic Behavior of VO_2/Polymer Nanocomposites for Energy Saving Coatings. *Journal Coatings, 9*(163), 1-12.

Yin, S., Riapanitra, A., & Asakura, Y. (2018). Nanomaterials for Infrared Shielding Smart Coatings. *Functional Materials Letters, 1*(1), 1-9.

Ying, F., Tao, T., Hong, L., & Wang, L. (2015). Controlled fabrication of bismuth vanadium oxide hierarchical microtubes with enhanced visible-light photocatalytic activity. *Mater. Sci. Semicond. Process, 32*, 82-89.

Yu, J. Q., & Kudo, A. (2006). Effects of structural variation on the photocatalytic performance of hydrothermally synthesized $BiVO_4$. *Advanced Functional Materials*, *16*(16), 2163-2169.

Yu, Y., Huang, S., & Gu, Y. (2009). Synthesis and photocatalytic performances of $BiVO_4$ by ammonia co-precipitation process. *J. Solid State Chem*, 223-228.

Yuningrat, N. W. (2016). Fotodegradasi metil orange dalam reaktor fixed bed batu apung semen. *Jurnal Sains dan Teknologi*, *5*(1). doi:ISSN: 2303-3142

Yusefah, D., & Amaria. (2014). Pengaruh Suhu Kalsinasi terhadap Ukuran Kristal dan Energi Celah Pita Komposit TiO_2-SiO_2. *UNESA Journal of Chemistry*, *3*(1).

Zhang, A. P., Zhang, J. Z., Cui, N. Y., & Tie, X. Y. (2009). Effects of pH on hydrothermal synthesis and characterization of visible-light-driven $BiVO_4$ photocatalyst. *Journal of Molecular Catalysis A: Chemical*, *304*(1-2), 28-32.

Zhang, L., Long, J., Pan, W., Zhou, S., Zhu, J., & Zhao, Y. (2012). Efficient removal of methylene blue over composite-phase $BiVO_4$ fabricated by hydrothermal control synthesis. *Materials Chemistry and Physics*(136), 897-902. doi:10.1016/j.matchemphys.2012.08.016

Zhao, Y., Xie, Y., Zhu, X., Yan, S., & Wang, S. X. (2008). Surfactant-free synthesis of hyperbranched monoclinic bismuth vanadate and its applications in photocatalysis, gas sensing, and lithium-ion batteries. *Chemistry–A European Journal*, *14*(5), 1601-1606.