DAFTAR PUSTAKA

1. Wulandari, H.E.; Gontjang, P.: Studi awal fabrikasi (DSSC) menggunakan ekstraksi bunga sepatu (Hibiscusrosa sinensis L) sebagai dye-sensitezed dengan variasi lama absorpsi dye, ITS, Surabaya, 2012.
2. Hadeli; S.; Riky; Fernando, T.; Maulidis; Silvia, R.: Dye-sensitized solar cells (DSSC) berdasarkan nanopori TiO_2 menggunakan antosianin dari berbagai sumber alami, *Prosiding Semirata FMIPA Universitas Lampung*, Lampung, 2013.
3. Aziz, H.; Admin, A.; Syukri; Safni; Olly, N.T.: *Pengantar Fotokimia*, Sukabina Press, Padang, 2013.
4. Tan, Y.Y.; Wei, H.T.; Sergei, M.: Computational design of small organic dye with strong visible absorption by controlled quinoidization of the thiopene unit, *Chemical Physics Letters,* 2014, 593, 14-19.
5. Setiadji, S.; Althar, L.I.; Bio I.A.: Studi komputasi senyawa dopamin dan dopamin-$Ti(OH)_2$ untuk aplikasi sel surya tersensitasi zat warna, 2015, 2, IX, 205.
6. Shi-Lu, C.; Li-Na, Y.; Ze-Sheng, L.: How to design more efficient organic dyes for dye-sensitized solar cells? adding more sp^2-hybridized nitrogen in the triphenylamine donor, *Journal of Power Sources,* 2013, 223, 86-93.
7. Prianto, B.: *Pemodelan kimia komputasi,* Penelitian Bidang Material Dirgantara, Lapan, 2010.
8. Tahir, I.; Faiz, E.M.; Harno, D.P.; Karna, W.: Analisis sifat fotosensitizer senyawa antaibakteri turunan fluorokuinolon berdasarkan data transisi elektronik dan selisih energi orbital HOMO-LUMO, *Makalah Regional Conference on Pharmaceutical and Biomedical Analysis School of Pharmacy,* 2005, 1-12.
9. Manurung, R.; Rosdeneli H.; Irvan.: perombakan zat warna azo reaktif secara anaerob-aerob, *e-USU Repository* 2004, 3.
10. Li, Hai-Bin; Ji, Z.; Yong, W.; Jun-Ling, J.; Yu-Ai, D.; Zhong-Min, S.; Yun, G.: Theoritical study and design of triphenylamine-malononitrile-based p-type organic dyes with different π-linker for dyes-sensitized solar cells, *Dyes and Pigments,* 2014, 108, 106.
11. Gunadi, N.: Degradasi fotokatalitik zat warna remazol red RB 133 dalam sistem TiO_2 suspensi, *Skripsi,* FMIPA, Universitas Indonesia, Depok, 2008.
12. Shen, P.; Huang, X.; Zhao, B.; Xiang, N.; Fei, J.; Liu, L.; Wang, X.; Huang, H.; Tan, S.: Efficient triphenylamine dyes for solar cells: effect of alkyl-substituents and π-conjugated thiophene unit, *Dyes and Pigment*, 2009, 83 (2), 187-197.
13. Xu, W.; Peng, B.; Chen, J.; Liang, M.; Chai, F.: New triphenylamine-based dyes for dye-sensitized solar cells, *The Journal of Physical Chemistry C,* 2008, 112 (3), 874-880.
14. Affandi, G. S.: Kajian teoritis pengaruh gugus trifenilamin dan asam sianoasetat pada pelagonidin sebagai senyawa dye sel surya tersensitasi (DSSC), *Skripsi*, Fakultas Sains dan Teknologi, Universitas Islam Negeri Sunan Kalijaga, Yogyakarta, 2016.
15. Hartini, E.: Modifikasi zeolit alam dengan ZnO untuk degradasi fotokatalisis zat warna, *Tesis*, FMIPA, Universitas Indonesia, Depok, 2011.

16. Male, Y.T.; I, W.S.; Olivia M.R.: Studi komputasi zat warna (dyes) alami sebagai material aktif pada sel surya organik menggunakan teori fungsional kerapatan (Density Functional Theory, DFT), *Ind.J.Chem.Res,* 2015, 2, 205.
17. Male, Y.T.: Studi komputasi senyawa kompleks transisi spin besi (II), *Disertasi*, Institut Teknologi Bandung, Bandung, 2009.
18. Pranowo, H.D.: Molecular modeling and simulation, *Chemistry Department*, Gajah Mada University, Yogyakarta, 2008.
19. Padmanabhan, J.; R, Parthasarathi.; V, Subramanian.; PK, Chattaraj .: Group philicity and electrophilicity as possible descriptors for modeling ecotoxicity applied to chlorophenols, *Chemical Research Toxicology,* 2006, 19, 356-364.
20. Tahir, I.; Mohd, N.A.; AKM, S.I.; Dahyar, A.: Rational design of molecular imprinting polymer based on AM1 semiempirical study of allopurinol-methacrylic acids interactions, *Malaysian Technical Universities International Conference on Engineering & Technology (MUICET),* 2011.
21. Prasetya, A.T.; M. Alauhdin; Nuni W.: Simulasi efektivitas senyawa obat eritromisin F dan $\Delta^{6,7}$ anhidroeritromisin F dalam lambung menggunakan metoda semiempiris Austin Model 1 (AM1), 2010, 1, 8, 96.
22. Chaloner, P.A.; Gunatunga, S.R.; Hitchcock, P.B.: Redetermination of 2,2'-bithiophene, *Acta Crystallographica, Section C: Crystal Structure Communications,* 1994, C50, 1941–2.
23. Ciofalo, M.; Ponterini, G.: Generation of singlet oxygen by 2,2':5',2''-terthiophene and some of its derivatives, *Journal of Photochemistry and Photobiology A,* 1994, 83 (1), 1–6.
24. Badguiar, S.; Chinna, B.; Sang-Jin, M.; Soo-Hyung, L.; Sang, K.L.: Synthesis and characterization of dithieno [3,2-b:2',3'-d] thiophene-based copolymers for polymer solar cells, *Journal of Nanoscience and Nanotechnology,* 2014, 14, 6060-6064.
25. Ahmed, M.O.; Wojciech, P.; Subodh, G.M.: Synthesisi and characterization of new thieno [3,2-b] thiophene derivatives, *Molecules,* 2012, 17, 12163-12171.
26. Liu, X.; Rongxing, H.; Wei, S.; Ming, L.: Molecular design of donor-acceptor conjugated copolymers based on C-, Si- and N-bridged dithiophene and thienopyrroledione derivatives units for organic solar cells, *Journal of Power Sources,* 2014, 245, 217-223.