

## DAFTAR PUSTAKA

- [1] F. D. Atmaja, Analisis Keseimbangan Pada Bak Penanaman Dalam Sistem Hidroponik Deep Flow Technique (DFT). 2009.
- [2] Delya, B.,Tusi, A., Lanya, B., & Zulkarnain, I. (2014). Design Of Ebb And Flow Automatic Hydroponic System For Chilli Pepper Cultivation. *Jurnal Fp Unila*, 3 (3), 205 – 212.
- [3] Y. Arafat, Penyiram Tanaman Hidroponik Otomatis Menggunakan Tenaga Surya Berbasis Mikrokontroler. 2015.
- [4] Wulandari, P., Studi, P., Elektro, T., Teknik, F., & Surakarta, U. M. Rancang Bangun Prototipe Sistem Pompa Air Mengambang Bertenaga Surya Untuk Irigasi. 2014.
- [5] H. Tabaei and M. Ameri, “Improving the effectiveness of a photovoltaik water pumping system by using booster reflector and cooling array surface by a film of water,” *Iranian Journal of Science and Technology Transactions of Mechanical Engineering*, Vol. 39, pp. 51–60, 2015.
- [6] F. H. Nasir and Y. Husaini, “MATLAB Simulation of Photovoltaik and Photovoltaik/Thermal Systems Performance,” presented at the IOP Conference Series: Materials Science and Engineering, 2018, Vol. 341, p. 012019.
- [7] H. Yudha, T. Dewi, P. Risma, and Y. Oktarina, “Life Cycle Analysis for the Feasibility of Photovoltaik System Application in Indonesia,” presented at the IOP Conference Series: Earth and Environmental Science, 2018, Vol. 124, p. 012005.
- [8] Y. Irwan et al., “Comparison of solar panel cooling system by using dc brushless fan and dc water,” presented at the Journal of Physics: Conference Series, 2015, Vol. 622, p. 012001.
- [9] A. Elnozahy, A. K. A. Rahman, A. H. H. Ali, M. Abdel-Salam, and S. Ookawara, “Performance of a PV module integrated with standalone building in hot arid areas as enhanced by surface cooling and cleaning,” *Energy and Buildings*, Vol. 88, pp. 100–109, 2015.
- [10] F. Spertino, A. D’angola, D. Enescu, P. Di Leo, G.V. Fracastoro, and R. Zaffina, “Thermal–electrical model for energy estimation of a water cooled photovoltaik module,” *Solar Energy*, Vol. 133, pp. 119–140, 2016.
- [11] H. Zondag, “Flat-plate PV-Thermal collectors and systems: A review,” *Renewable and Sustainable Energy Reviews*, Vol. 12, no. 4, pp. 891–959, 2008.
- [12] D. Du, J. Darkwa, and G. Kokogiannakis, “Thermal management systems for photovoltaiks (PV) installations: a critical review,” *Solar Energy*, Vol. 97, pp. 238–254, 2013.

- [13] S. Krauter, "Increased electrical yield Via water flow over the front of photovoltaik panels," *Solar energy materials and solar cells*, Vol. 82, no. 1–2, pp. 131–137, 2004.
- [14] "Physics and Radio-Electronics," 2015-2013. .
- [15] Jordan Hanania, Kailyn Stenhouse, and Jason Donev, "Photovoltaik effect," *EnergiEducation*, 26-Aug-2015. [Online]. Available: [https://energyeducation.ca/encyclopedia/Photovoltaik\\_effect](https://energyeducation.ca/encyclopedia/Photovoltaik_effect). [Accessed: 14-Jul-2018].
- [16] EnergySage, "EnergySage," 2018 [Online]. Available: <https://www.energysage.com>. [Accessed: 20-Jul-2018].
- [17] Christiana Honsberg and Stuart Bowden, "PV Education.org," *PVEducation.org*, 2013. [Online]. Available: <https://www.pveducation.org/>. [Accessed: 14-Jul-2018].
- [18] LUCAS-NÜLLE GmbH, *Renewable energy - Photovoltaiks*. 2002.
- [19] R. Mazón-Hernández, J. García-Cascales, F. Vera-García, A. Káiser, and B. Zamora, "Improving the electrical parameters of a photovoltaik panel by means of an induced or forced air stream," *International Journal of Photoenergy*, Vol. 2013, 2013.
- [20] T. A. Kumar, C. S. Murthy, and A. Mangalpady, "Performance analysis of PV panel under Varying surface suhue," presented at the MATEC Web of Conferences, 2018, Vol. 144, p. 04004.
- [21] E. Chaniotakis, "Modelling and analysis of water cooled photovoltaiks," *Department of Mechanical Engineering University of Strathclyde*, pp. 1–84, 2001.
- [22] A. F. Castanheira, J. F. Fernandes, and P. C. Branco, "Demonstration project of a cooling system for existing PV power plants in Portugal," *Applied Energy*, Vol. 211, pp. 1297–1307, 2018.
- [23] A. Makki, S. Omer, and H. Sabir, "Advancements in hybrid photovoltaik systems for enhanced solar cells performance," *Renewable and sustainable energy reviews*, Vol. 41, pp. 658–684, 2015.
- [24] L. Zhu, A. Raman, K. X. Wang, M. A. Anoma, and S. Fan, "Radiative cooling of solar cells," *Optica*, Vol. 1, no. 1, pp. 32–38, 2014.