

## DAFTAR PUSTAKA

- [1] M. Attaufiq dan M. Rahman, “Tantangan implementasi bangunan cerdas di indonesia,” *J. Build. Archit.*, no. Query date: 2025-04-26 00:22:28, 2024, [Daring]. Tersedia pada: <https://jurnalvokasi.ung.ac.id/ijba/index.php/ijba/article/view/47>
- [2] M. Fathoni, V. Wiliyanti, L. Lendra, “Hubungan antara penggunaan teknologi sensor iot dan efisiensi energi dalam bangunan cerdas,” *J. Rev. ...*, no. Query date: 2025-04-26 00:20:45, 2024, [Daring]. Tersedia pada: <http://journal.universitaspahlawan.ac.id/index.php/jrpp/article/view/30180>
- [3] N. Mahmoud, G. E. Samanoudy, dan C. Jung, “Simulating the natural lighting for a physical and mental Well-being in residential building in Dubai, UAE,” *Ain Shams Eng. J.*, no. Query date: 2025-04-26 00:24:37, 2023, [Daring]. Tersedia pada: <https://www.sciencedirect.com/science/article/pii/S2090447922001216>
- [4] H. Gundogdu, M. Terkes, A. Demirci, dan U. Cali, “Assessing energy savings and visual comfort with PDLC-based smart window in an Istanbul office building: A case study,” *Energy Rep.*, no. Query date: 2025-04-26 00:25:12, 2024, [Daring]. Tersedia pada: <https://www.sciencedirect.com/science/article/pii/S2352484724006632>
- [5] *Tata cara perancangan sistem pencahayaan alami pada bangunan gedung*, SNI 03-2396-2001.
- [6] I. Bournas, “Daylight compliance of residential spaces: Comparison of different performance criteria and association with room geometry and urban density,” *Build. Environ.*, no. Query date: 2025-04-26 00:23:57, 2020, [Daring]. Tersedia pada: <https://www.sciencedirect.com/science/article/pii/S0360132320306478>
- [7] A. Tabadkani, A. Roetzel, H. X. Li, dan A. Tsangrassoulis, “Daylight in Buildings and Visual Comfort Evaluation: the Advantages and Limitations July 2021Journal of Daylighting 8(2):181-203 DOI: 10.15627/jd.2021.16 LicenseCC BY-NC-ND,” *J. Daylighting*, vol. 8, no. 2, hlm. 181–203, Jul 2021, doi: 10.15627/jd.2021.16.
- [8] F. Bashir, Y. Dodo, M. Mohamed, “Effects of natural light on improving the lighting and energy efficiency of buildings: toward low energy consumption and CO2 emission,” ... *J. Low ...*, no. Query date: 2025-06-20 16:53:14, 2024, doi: 10.1093/ijlct/ctad130/7612729.
- [9] A. Mesloub, A. Ghosh, L. Kolsi, dan M. Alshenaifi, “Polymer-Dispersed Liquid Crystal (PDLC) smart switchable windows for less-energy hungry buildings and visual comfort in hot desert climate,” *J. Build. ...*, no. Query date: 2025-04-26 00:26:55, 2022.



- [10] B. Poirier, G. Guyot, H. Geoffroy, M. Woloszyn, dan ..., "Pollutants emission scenarios for residential ventilation performance assessment. A review," *J. Build.* ..., no. Query date: 2025-04-26 00:32:17, 2021.
- [11] L. Casals, A. Alegria-Sala, N. Bonet, "Educational environments' energy demand optimization based on indoor CO<sub>2</sub> concentration and temperature: Together better than separately," *Building*. no. Query date: 2025-04-26 00:32:58, 2024, [Daring]. Tersedia pada: <https://www.sciencedirect.com/science/article/pii/S0360132324009636>
- [12] T. de F. Baptista, "Indoor Environmental Quality Assessment in Groceries," no. Query date: 2025-06-20 16:59:30, 2022, [Daring]. Tersedia pada: <https://repositorio.ipl.pt/server/api/core/bitstreams/d121a408-b65e-4ec8-92f5-e74c2677d757/content>
- [13] S. Kalender-Smajlović, A. Kušec, dan M. Dovjak, "The problem of indoor environmental quality at a general Slovenian hospital and its contribution to sick building syndrome," *Build. Environ.*, no. Query date: 2025-06-20 17:03:07, 2022.
- [14] I. Budaiwi dan M. A. Fasi, "Assessing the energy-saving potential and visual comfort of electrochromic smart windows in office buildings: A case study in Dhahran, Saudi Arabia," *Sustainability*, no. Query date: 2025-06-20 17:14:52, 2023, [Daring]. Tersedia pada: <https://www.mdpi.com/2071-1050/15/12/9632>
- [15] S. Jain, C. Karmann, dan J. Wienold, "Behind electrochromic glazing: Assessing user's perception of glare from the sun in a controlled environment," *Energy Build.*, no. Query date: 2025-06-20 17:32:26, 2022, [Daring]. Tersedia pada: <https://www.sciencedirect.com/science/article/pii/S0378778821010227>
- [16] G. Song, Z. Ai, Z. Liu, dan G. Zhang, "A systematic literature review on smart and personalized ventilation using CO<sub>2</sub> concentration monitoring and control," *Energy Rep.*, no. Query date: 2025-05-12 17:34:28, 2022, [Daring]. Tersedia pada: <https://www.sciencedirect.com/science/article/pii/S2352484722010897>
- [17] Y. Choi, E. Choi, J. Byun, H. Moon, M. Sung, "CO<sub>2</sub>- and PM<sub>2.5</sub>-Focused Optimal Ventilation Strategy Based on Predictive Control," *Indoor* ..., no. Query date: 2025-06-20 17:26:22, 2025, doi: 10.1155/ina/6652442.
- [18] "Occupational Safety and Health Administration (OSHA): Indoor Air Quality," *US Department of Labor*. Diakses: 13 Maret 2025. [Daring]. Tersedia pada: <https://www.osha.gov/indoor-air-quality/faqs>.
- [19] L. Kajtár dan L. Herczeg, "Influence of carbon-dioxide concentration on human well-being and intensity of mental work," *QJ Hung Meteorol Serv*, no. Query date: 2025-06-20 18:45:44, 2012.



- [20] S. Pan, L. Fulton, A. Roy, J. Jung, Y. Choi, dan ..., "Shared use of electric autonomous vehicles: Air quality and health impacts of future mobility in the United States," *Sustain. Energy*, no. Query date: 2025-05-18 21:10:27, 2021.
- [21] A. Zhigulina, "Creating a comfortable lighting environment using glazing systems," *Innov. Proj.*, no. Query date: 2025-06-20 16:53:14, 2025, [Daring]. Tersedia pada: <https://journals.eco-vector.com/2500-3437/article/view/683076>
- [22] Alan. L. Lewis dan Jennifer. A. Veitch, "Measuring Light for Vision, Health, and Everything Else," Illuminating Engineering Society.
- [23] *Tata cara perancangan sistem pencahayaan buatan pada bangunan gedung.*, SNI 03-6575-2001.
- [24] S. Agarwal, S. Srivastava, S. Joshi, S. Tripathi, "A Comprehensive Review on Polymer-Dispersed Liquid Crystals: Mechanisms, Materials, and Applications," *ACS Mater*, no. Query date: 2025-06-20 19:06:28, 2024, doi: 10.1021/acsmaterialsau.4c00122.
- [25] M. Saeed, S. Zhang, Y. Cao, L. Zhou, J. Hu, "Recent advances in the polymer dispersed liquid crystal composite and its applications," *Molecules*, no. Query date: 2025-06-20 19:06:50, 2020, [Daring]. Tersedia pada: <https://www.mdpi.com/1420-3049/25/23/5510>
- [26] A. Hemaida, A. Ghosh, S. Sundaram, dan T. Mallick, "Evaluation of thermal performance for a smart switchable adaptive polymer dispersed liquid crystal (PDLC) glazing," *Sol. Energy*, no. Query date: 2025-06-20 19:11:47, 2020, [Daring]. Tersedia pada: <https://www.sciencedirect.com/science/article/pii/S0038092X19311247>
- [27] Y. Wu, Y. Zhao, X. Li, dan H. Gao, "Preparation and Characterization of Bilayer Polymer-Dispersed Liquid Crystals Doped with Gd<sub>2</sub>O<sub>3</sub> Nanoparticles and Rhodamine B Base Fluorescent Dye," *Molecules*, vol. 29, no. 5, hlm. 1126, Mar 2024, doi: 10.3390/molecules29051126.
- [28] P. Yu *dkk.*, "Electro-Optical Properties of Polymer-Dispersed Liquid Crystal Films Based on Flexible Substrate with UV Protective Effect," *Langmuir*, vol. 39, no. 1, Des 2022, doi: 10.1021/acs.langmuir.2c02895.
- [29] A. Koch, *Measurement and Sensor Systems*. Springer, 2023. doi: 10.1007/978-3-031-15870-4.
- [30] "International vocabulary of metrology – Basic and general concepts and associated terms (VIM)." *Vocabulaire international de métrologie*, 2008.
- [31] "Digital 16bit Serial Output Type Ambient Light Sensor IC." ROHM semiconductor, 2009. [Daring]. Tersedia pada: <http://www.rohm.com>



- [32] “Luxmeter.” Magnaflux, 2021. [Daring]. Tersedia pada: <https://magnaflux.eu/EU-Files/Product-Data-Sheets/Equipment--Accessories/Luxmeter-PDS.pdf>
- [33] “VL53L0X Datasheet.” STMicroelectronics, Mei 2016.
- [34] L. Mendes, N. Ogink, N. Edouard, H. V. Dooren, “NDIR gas sensor for spatial monitoring of carbon dioxide concentrations in naturally ventilated livestock buildings,” *Sensors*, no. Query date: 2025-06-21 19:12:49, 2015, [Daring]. Tersedia pada: <https://www.mdpi.com/1424-8220/15/5/11239>
- [35] “Intelligent Infrared CO2 Module (Model: MH-Z19).” Zhengzhou Winsen Electronics Technology Co., Ltd, 3 Maret 2015.
- [36] *ANSI/ASHRAE 62.1-2022 Ventilation and Acceptable Indoor Air Quality*, 2022.
- [37] H. Janocha, *Actuators: Basics and Applications*. Springer, 2004.
- [38] T. Wildi, *Electrical machines, drives, and power systems*. books.google.com, 2006. [Daring]. Tersedia pada: <https://books.google.com/books?hl=en&lr=&id=ehxKXip1j6EC&oi=fnd&pg=PA18&dq=electrical+machines+drives+and+power+systems&ots=5WhgogklJi&sig=JMtxPBtKX-PL98DjnTj57kxsOwA>
- [39] C. Fiore, “Stepper Motors: Types, Uses and Working Principle,” *Monolith. Power System*.
- [40] “Mengenal Motor Stepper: Pengertian, Cara Kerja dan Jenisnya.” Andalan Elektro, Januari 2021. Diakses: 15 April 2025.
- [41] D. Kho, “Pengertian Relay dan Fungsinya,” *Tek. Elektro*, 2025.
- [42] S. GINZBURG, I. LEKHTMAN, dan V. MALOV, “Fundamentals of automation and remote control (Summary information on automatic control systems, servomechanisms, remote control systems, computer,” no. Query date: 2025-06-21 20:08:11, 1967.
- [43] “ESP32 Datasheet.” Espressif System, 2019. [Daring]. Tersedia pada: <https://www.espressif.com/>
- [44] N. Nise, *Control systems engineering*. books.google.com, 2019. [Daring]. Tersedia pada: <https://books.google.com/books?hl=en&lr=&id=fj6MEAAAQBAJ&oi=fnd&pg=PR9&dq=nise+control&ots=HmBBpzIV4a&sig=7UdeMS5nIfAJpFwlnPbP-yfgXsY>



- [45] A. Barkalov, L. Titarenko, M. Mazurkiewicz, dan ..., "Programmable logic controllers," ... *Embed. Syst.*, no. Query date: 2025-06-21 16:51:48, 2019, doi: 10.1007/978-3-030-11961-4\_6.
- [46] *A Residential Case Of Automatic Sliding Window With KST-SLO2 Window Openers*, (2023). [Daring Video]. Tersedia pada: <https://youtu.be/BHeVSsdPt5Y?si=8AmQRLRPHDI-MfDn>
- [47] *OS101 Smart Automatic Sliding Window Opener No-Drill Installation*, (2024). [Daring Video]. Tersedia pada: [https://youtu.be/h22Y2-CoxLA?si=PRE3pLdcYw\\_7Nw01](https://youtu.be/h22Y2-CoxLA?si=PRE3pLdcYw_7Nw01)
- [48] G. James, D. Witten, T. Hastie, dan R. Tibshirani, "Statistical learning. An Introduction To Statistical Learning: With Applications in R, 2021," *Springer US N. Y. NY*, no. Query date: 2025-06-24 19:56:23, 2021.

