



DAFTAR PUSTAKA

- [1] P. Dean, B., Dulac, J., Petrichenko, K., and Graham, *Towards a zero-emission, efficient, and resilient buildings and construction sector*. 2016.
- [2] S. N. Indonesia dan B. S. Nasional, “Konservasi energi pada sistem pencahayaan,” 2011.
- [3] S. N. Indonesia dan B. S. Nasional, *Tata cara perancangan sistem pencahayaan alami pada bangunan gedung*. 2001.
- [4] B. Ardiyanto, S. S. Utami, dan M. K. Ridwan, “Analisis Kualitas Pencahayaan Menggunakan Pemodelan Numeris Sesuai SNI Pencahayaan , Data Pengukuran Langsung (On-Site) dan Simulasi,” vol. 3, no. 2, hal. 63–71, 2014.
- [5] R. M. Reffat dan R. M. Ahmad, “Determination of optimal energy-efficient integrated daylighting systems into building windows,” *Sol. Energy*, vol. 209, no. August, hal. 258–277, 2020, doi: 10.1016/j.solener.2020.08.086.
- [6] K. M. Al-Obaidi, M. Ismail, dan A. M. A. Rahman, “A review of skylight glazing materials in architectural designs for a better indoor environment,” *Mod. Appl. Sci.*, vol. 8, no. 1, hal. 68–82, 2014, doi: 10.5539/mas.v8n1p68.
- [7] J. Li, X. Chen, Q. Ban, dan J. Yao, “Skylight Sizing based on balancing Daylighting Performance and Visual Comfort in Atrium Buildings,” *IOP Conf. Ser. Mater. Sci. Eng.*, vol. 556, no. 1, 2019, doi: 10.1088/1757-899X/556/1/012051.
- [8] Britannica, “Low-rise building,” *Britannica*, 2020. <https://www.britannica.com/technology/construction> (diakses Feb 12, 2021).
- [9] J. Noel J. Raufaste dan R. D. Marshall, *Development of Improved Design Criteria for Low-Rise Buildings in Developing Countries to Better Resist the Effects of Extreme Winds*. Washington, D.C.: U.S. Department of Commerce, 1974.
- [10] M. Mohsenin dan J. Hu, “Assessing daylight performance in atrium buildings by using Climate Based Daylight Modeling,” *Sol. Energy*, vol. 119, hal. 553–560, 2015, doi: 10.1016/j.solener.2015.05.011.
- [11] S. Motamedi dan P. Liedl, “Integrative algorithm to optimize skylights considering fully impacts of daylight on energy,” *Energy Build.*, vol. 138,



hal. 655–665, 2017, doi: 10.1016/j.enbuild.2016.12.045.

- [12] D. P. E. L. and R. P. Salisnanda, “Atrium Form and Thermal Performance of Middle-Rise Wide Span Building in Tropics Atrium Form and Thermal Performance of Middle-Rise Wide Span Building in Tropics,” *IOP Conf. Ser. Mater. Sci. Eng.*, 2019, doi: 10.1088/1757-899X/462/1/012030.
- [13] P. de Wilde, “Ten questions concerning building performance analysis,” *Build. Environ.*, vol. 153, no. December 2018, hal. 110–117, 2019, doi: 10.1016/j.buildenv.2019.02.019.
- [14] F. Kheiri, “A review on optimization methods applied in energy-efficient building geometry and envelope design,” *Renew. Sustain. Energy Rev.*, vol. 92, no. April, hal. 897–920, 2018, doi: 10.1016/j.rser.2018.04.080.
- [15] J. H. Choi, “Investigation of the correlation of building energy use intensity estimated by six building performance simulation tools,” *Energy Build.*, vol. 147, hal. 14–26, 2017, doi: 10.1016/j.enbuild.2017.04.078.
- [16] G. N. TIWARI, *Handbook of Solar Energy: Theory, Analysis and Applications*. 2018.
- [17] J. Mardaljevic, *Daylight Simulation: Validation, Sky Models and Daylight Coefficients*. Leicester: Loughborough University, 2000.
- [18] C. Boix, *Political order and inequality: Their foundations and their consequences for human welfare*. 2015.
- [19] M. Ayoub, “100 Years of daylighting: A chronological review of daylight prediction and calculation methods,” *Sol. Energy*, vol. 194, no. August, hal. 360–390, 2019, doi: 10.1016/j.solener.2019.10.072.
- [20] A. D. Galasiu dan C. F. Reinhart, “Current daylighting design practice: A survey,” *Build. Res. Inf.*, vol. 36, no. 2, hal. 159–174, 2008, doi: 10.1080/09613210701549748.
- [21] I. L. Wong, “A review of daylighting design and implementation in buildings,” *Renew. Sustain. Energy Rev.*, vol. 74, no. March, hal. 959–968, 2017, doi: 10.1016/j.rser.2017.03.061.
- [22] D. B. Crawley, “Creating weather files for climate change and urbanization impacts analysis,” *IBPSA 2007 - Int. Build. Perform. Simul. Assoc. 2007*, hal. 1075–1082, 2007.
- [23] A. Moazami, V. M. Nik, S. Carlucci, dan S. Geving, “Impacts of future weather data typology on building energy performance – Investigating long-term patterns of climate change and extreme weather conditions,” *Appl. Energy*, vol. 238, no. December 2018, hal. 696–720, 2019, doi: 10.1016/j.apenergy.2019.01.085.
- [24] W. Li *et al.*, “Modeling urban building energy use: A review of modeling approaches and procedures,” *Energy*, vol. 141, hal. 2445–2457, 2017, doi:



10.1016/j.energy.2017.11.071.

- [25] M. Herrera *et al.*, “A review of current and future weather data for building simulation,” *Build. Serv. Eng. Res. Technol.*, vol. 38, no. 5, hal. 602–627, 2017, doi: 10.1177/0143624417705937.
- [26] O. Walkenhorst, J. Luther, C. Reinhart, dan J. Timmer, “Dynamic annual daylight simulations based on one-hour and one-minute means of irradiance data,” *Sol. Energy*, vol. 72, no. 5, hal. 385–395, 2002, doi: 10.1016/S0038-092X(02)00019-1.
- [27] L. Bellia, A. Pedace, dan F. Fragliasso, “Dynamic daylight simulations: Impact of weather file’s choice,” *Sol. Energy*, vol. 117, hal. 224–235, 2015, doi: 10.1016/j.solener.2015.05.002.
- [28] ASHRAE, “Climatic Design Information,” *ASHRAE Fundam. Handb.*, hal. 128, 2009, doi: 10.1016/0140-7007(79)90114-2.
- [29] D. B. Crawley dan L. K. Lawrie, “Rethinking the tmy: Is the ‘typical’ meteorological year best for building performance simulation?,” *14th Int. Conf. IBPSA - Build. Simul. 2015, BS 2015, Conf. Proc.*, hal. 2655–2662, 2015.
- [30] D. Ferrari dan T. Lee, “Beyond Tmy: Climate Data for Specific Applications,” *Sol. Energy*, no. November 2008, hal. 1–12, 2008.
- [31] A. L. Webb, “Proceedings of BS2013: 13th Conference of International Building Performance Simulation Association, Chambéry, France, August 26-28,” hal. 1642–1648, 2009.
- [32] C. Liu, “Future weather dataset for fourteen UK sites,” *Data Br.*, vol. 8, hal. 1308–1310, 2016, doi: 10.1016/j.dib.2016.07.057.
- [33] A. Eltaweeel dan Y. SU, “Parametric design and daylighting: A literature review,” *Renew. Sustain. Energy Rev.*, vol. 73, no. October 2016, hal. 1086–1103, 2017, doi: 10.1016/j.rser.2017.02.011.
- [34] M. Ayoub dan A. Elseragy, “Parameterization of traditional domed-roofs insolation in hot-arid climates in Aswan, Egypt,” *Energy Environ.*, vol. 29, no. 1, hal. 109–130, 2018, doi: 10.1177/0958305X17741285.
- [35] M. Ayoub, “A multivariate regression to predict daylighting and energy consumption of residential buildings within hybrid settlements in hot-desert climates,” *Indoor Built Environ.*, vol. 28, no. 6, hal. 848–866, 2019, doi: 10.1177/1420326X18798164.
- [36] C. F. Reinhart, J. A. Jakubiec, dan D. Ibarra, “Definition of a reference office for standardized evaluations of dynamic façade and lighting technologies,” *Proc. BS 2013 13th Conf. Int. Build. Perform. Assoc.*, hal. 3645–3652, 2013.
- [37] M. Ayoub, “Integrating illuminance and energy evaluations of cellular



automata controlled dynamic shading system using new hourly-based metrics,” *Sol. Energy*, vol. 170, no. May, hal. 336–351, 2018, doi: 10.1016/j.solener.2018.05.041.

- [38] P. R. Tregenza, “The Monte Carlo Method in Lighting Calculations,” *Light. Res. Technol.*, vol. 15, no. November 1983, hal. 163–170, 1983.
- [39] Y. Bian dan Y. Ma, “Analysis of daylight metrics of side-lit room in Canton, south China: A comparison between daylight autonomy and daylight factor,” *Energy Build.*, vol. 138, hal. 347–354, 2017, doi: 10.1016/j.enbuild.2016.12.059.
- [40] S. Subramaniam, “Parametric modeling strategies for efficient annual analysis of daylight in buildings,” no. May, 2018.
- [41] D. H. W. Li dan S. Lou, “Review of solar irradiance and daylight illuminance modeling and sky classification,” *Renew. Energy*, vol. 126, no. August, hal. 445–453, 2018, doi: 10.1016/j.renene.2018.03.063.
- [42] Integrated Environment Solution, “IESVE,” *Integrated Environment Solution*, 2020. <https://www.iesve.com/> (diakses Feb 12, 2021).
- [43] Y. T. Chang dan S. H. Hsieh, “A review of building information modeling research for green building design through building performance analysis,” *J. Inf. Technol. Constr.*, vol. 25, hal. 1–40, 2020, doi: 10.36680/j.itcon.2020.001.
- [44] B. S. Nasional, “SNI 03-6574-2011 tentang Tata Cara Perancangan Sistem Pencahayaan Buatan pada Bangunan Gedung,” Jakarta, 2011.
- [45] S. N. Indonesia dan B. S. Nasional, “Pengukuran intensitas penerangan di tempat kerja,” 2004.
- [46] Green Building Council Indonesia, “GREENSHIP Rating Tools,” 2021. <https://www.gbcindonesia.org/greenchip> (diakses Jan 15, 2021).
- [47] Green Building Council Indonesia, “GREENSHIP RATING TOOLS GREENSHIP untuk BANGUNAN BARU Versi 1.2,” vol. 2014, no. April 2013, 2014.
- [48] Green Building Council of The United States, “The Evolution of USGBC,” *USGBC*, 2018. <https://plus.usgbc.org/evolution-usgbc/> (diakses Jan 15, 2021).
- [49] U.S. Green Building Council, *LEED v4.1 Building Design and Construction*. Washington: U.S. Green Building Council, 2020.
- [50] L. Buckley, “TEN Key Daylight & Electric Light Metrics,” *Integrated Environment Solution*, 2019. <https://www.iesve.com/discoveries/article/3813/ten-key-daylight-and-electric-metrics> (diakses Jan 15, 2021).



- [51] R. B. Leighton, *Feynman's Lectures on Physics*. 1963.
- [52] W. B. Boast, *Illumination Engineering*. 1953.
- [53] Juniperus, “Light and health,” *Juniperus*, 2018. <https://juniperuseyewear.se/blue-light-health/> (diakses Jan 07, 2021).
- [54] J. H. Lambert, *Photometria*. Leipzig: Wilhelm Engelmann, 1760.
- [55] C. Internationale, “Photometric definitions Conversion between radiometric and photometric quantities,” hal. 2–4, 1924.
- [56] T. Kruisselbrink, R. Dangol, dan A. Rosemann, “Photometric measurements of lighting quality: An overview,” *Build. Environ.*, vol. 138, no. April, hal. 42–52, 2018, doi: 10.1016/j.buildenv.2018.04.028.
- [57] E. B. Rosa, “Photometric Units and Nomenclature,” in *Bulletin of the Bureau of Standards*, vol. 6, 1909, hal. 148–157.
- [58] S. Carlucci, F. Causone, F. De Rosa, dan L. Pagliano, “A review of indices for assessing visual comfort with a view to their use in optimization processes to support building integrated design,” *Renew. Sustain. Energy Rev.*, vol. 47, no. 7491, hal. 1016–1033, 2015, doi: 10.1016/j.rser.2015.03.062.
- [59] European committee for standardization, *BSI Standards Publication Light and lighting — Lighting of work places Part 1 : Indoor work places*. Brussels: European Committee for Standardization, 2011.
- [60] CIE Central Bureau, “e-ILV CIE Termlist,” *CIE Central Bureau*, 2014. <http://eilv.cie.co.at/term/258> (diakses Jan 30, 2021).
- [61] F. Authors, “Effects on sustainability of various skylight systems in buildings with an atrium,” 2013, doi: 10.1108/20466091211260587.
- [62] Green Building Council Indonesia, “Perangkat Penilaian GREENSHIP (GREENSHIP Rating Tools),” *Greensh. New Build. Versi 1.2*, no. April, 2013.
- [63] Y. Rizal, I. Robandi, dan E. M. Yuniarso, “Daylight Factor Estimation Based on Data Sampling Using Distance Weighting,” *Energy Procedia*, vol. 100, no. September, hal. 54–64, 2016, doi: 10.1016/j.egypro.2016.10.153.
- [64] Integrated Environment Solution, “Daylight Factor,” *Integrated Environment Solution*, 2018. https://help.iesve.com/ve2018/daylight_factor.htm?ms=QwAAAAAUAAA AAAAAAAAAAAAAAAAAGFIIAE%3D&st=MA%3D%3D&sct=MA%3D%3D&mw=NDEy (diakses Des 09, 2020).
- [65] U.S. Green Building Council, “Daylight,” *U.S. Green Building Council*, 2020. <https://www.usgbc.org/credits/eq8> (diakses Jan 02, 2021).



- [66] Integrated Environment Solution, “Simulate,” *Integrated Environment Solution*, 2018. <https://help.iesve.com/ve2018/simulate.htm> (diakses Des 09, 2020).
- [67] R. A. Mangkuto, D. Kusuma, A. Azalia, dan M. Donny, “Design optimisation of internal shading device in multiple scenarios : Case study in Bandung , Indonesia,” *J. Build. Eng.*, vol. 24, no. November 2018, hal. 100745, 2019, doi: 10.1016/j.jobe.2019.100745.
- [68] R. A. Mangkuto, M. Rohmah, dan A. D. Asri, “Design optimisation for window size, orientation, and wall reflectance with regard to various daylight metrics and lighting energy demand: A case study of buildings in the tropics,” *Appl. Energy*, vol. 164, hal. 211–219, 2016, doi: 10.1016/j.apenergy.2015.11.046.
- [69] B. Iooss dan A. Saltelli, “Introduction: Sensitivity Analysis,” hal. 31, 2014, [Daring]. Tersedia pada: http://www.andreasaltelli.eu/file/repository/intro_v2b.pdf.
- [70] A. Saltelli, “Sensitivity analysis for importance assessment,” *Risk Anal.*, vol. 22, no. 3, hal. 579–590, 2002, doi: 10.1111/0272-4332.00040.
- [71] L. G. Maltais dan L. Gosselin, “Daylighting ‘energy and comfort’ performance in office buildings: Sensitivity analysis, metamodel and pareto front,” *J. Build. Eng.*, vol. 14, no. September, hal. 61–72, 2017, doi: 10.1016/j.jobe.2017.09.012.
- [72] R. A. Mangkuto, *Pemodelan dan Simulasi Pencahayaan Alami dalam Bangunan di Indonesia*, I. Bandung: ITB Press, 2019.
- [73] J. Frost, “How to Interpret P-values and Coefficients in Regression Analysis,” *Statistics By Jim*, 2018. <https://statisticsbyjim.com/regression/interpret-coefficients-p-values-regression/> (diakses Jan 06, 2021).
- [74] S. McLeod, “What a p-value tells you about statistical significance,” *SimplyPsychology*, 2019. <a href="https://www.simplypsychology.org/p-value.html#:~:text=A p-value less than, and accept the alternative hypothesis. (diakses Jan 06, 2021).
- [75] N. Delgarm, B. Sajadi, K. Azarbad, dan S. Delgarm, “Sensitivity analysis of building energy performance: A simulation-based approach using OFAT and variance-based sensitivity analysis methods,” *J. Build. Eng.*, vol. 15, no. November 2017, hal. 181–193, 2018, doi: 10.1016/j.jobe.2017.11.020.
- [76] B. J. Futrell, E. C. Ozelkan, dan D. Brentrup, “Bi-objective optimization of building enclosure design for thermal and lighting performance,” *Build. Environ.*, vol. 92, hal. 591–602, 2015, doi: 10.1016/j.buildenv.2015.03.039.
- [77] D. G. Colliver dan R. E. Jarnagin, *Advanced energy design guide for small office buildings*, vol. 47, no. 3. 2005.



- [78] W. El-Abd, B. Kamel, M. Afify, dan M. Dorra, “Assessment of skylight design configurations on daylighting performance in shopping malls: A case study,” *Sol. Energy*, vol. 170, no. May, hal. 358–368, 2018, doi: 10.1016/j.solener.2018.05.052.
- [79] Y. Fang dan S. Cho, “Design optimization of building geometry and fenestration for daylighting and energy performance,” *Sol. Energy*, vol. 191, no. November 2018, hal. 7–18, 2019, doi: 10.1016/j.solener.2019.08.039.
- [80] P. Heiselberg, H. Brohus, A. Hesselholt, H. Rasmussen, E. Seinre, dan S. Thomas, “Application of sensitivity analysis in design of sustainable buildings,” *Renew. Energy*, vol. 34, no. 9, hal. 2030–2036, 2009, doi: 10.1016/j.renene.2009.02.016.
- [81] G. Setherton, “Green Roof Construction – How to Guide,” *Permagard*, 2020. <https://www.permagard.co.uk/advice/green-roof-construction> (diakses Jan 07, 2021).
- [82] S. Cascone, “Green Roof Design : State of the Art on Technology and Materials,” *Sustain.*, vol. 11, 2019.