

DAFTAR PUSTAKA

- [1] M. Uysal and H. Nouri, "Optical wireless communications - An emerging technology," *International Conference on Transparent Optical Networks*, pp. 1–7, 2014.
- [2] Ibadillah, "Analisa Rugi-Rugi Lintasan Pada Satelit Iridium Yang Beroperasi Pada Frekuensi Uplink 1650 Mhz," p. 1, 2019.
- [3] J. Liang, A. U. Chaudhry, E. Erdogan, and H. Yanikomeroglu, "Link Budget Analysis for Free-Space Optical Satellite Networks," *Proceedings - 2022 IEEE 23rd International Symposium on a World of Wireless, Mobile and Multimedia Networks, WoWMoM 2022*, pp. 471–476, 2022.
- [4] S. P. K. Sarker and M. A. Hossain, "Analysis of inter-satellite optical wireless communication systems for enhanced data transmission in satellite constellations," *Optics Continuum*, vol. 3, no. 7, pp. 1224–1243, 2024.
- [5] M. Toyoshima and Y. Takayama, "Space-based laser communication systems and future trends," *Optics InfoBase Conference Papers*, pp. 10–11, 2012.
- [6] E. Erdogan, I. Altunbas, G. K. Kurt, M. Bellemare, G. Lamontagne, and H. Yanikomeroglu, "Site Diversity in Downlink Optical Satellite Networks through Ground Station Selection," *IEEE Access*, vol. 9, pp. 31179–31190, 2021.
- [7] S. P. K. SARKER and M. A. HOSSAIN, "Analysis of inter-satellite optical wireless communication systems for enhanced data transmission in satellite constellations," *Optics Continuum*, vol. 3, no. 7, pp. 1224–1243, Jul. 2024.
- [8] M. M. Tawfik, M. F. A. Sree, M. Abaza, and H. H. M. Ghouz, "Performance Analysis and Evaluation of Inter-Satellite Optical Wireless Communication System (IsOWC) from GEO to LEO at Range 45000 km," *IEEE Photonics J*, vol. 13, no. 4, Aug. 2021.
- [9] N. Saeed, H. Almorad, H. Dahrouj, T. Y. Al-Naffouri, J. S. Shamma, and M. S. Alouini, "Point-to-Point Communication in Integrated Satellite-Aerial 6G Networks: State-of-the-Art and Future Challenges," 2021.

- [10] X. Li *et al.*, “A Bidirectional Multi-Format/Rate-Adjustable Integrated Laser Communication System for Satellite Communication,” *IEEE Photonics J*, vol. 16, no. 2, pp. 1–6, Apr. 2024.
- [11] M. H. Shaligram and P. K. Bajaj, “Performance Evaluation of Free Space Optical Communication System,” Nov. 28, 2023.
- [12] S. M. Walsh *et al.*, “Demonstration of 100 Gbps coherent free-space optical communications at LEO tracking rates,” *Sci Rep*, vol. 12, no. 1, Dec. 2022.
- [13] M. Tropea and F. De Rango, “A Comprehensive Review of Channel Modeling for Land Mobile Satellite Communications,” Mar. 01, 2022.
- [14] O. Kodheli *et al.*, “Satellite Communications in the New Space Era: A Survey and Future Challenges,” Jan. 01, 2021.
- [15] H. Al-Hraishawi, H. Chougrani, S. Kisseleff, E. Lagunas, and S. Chatzinotas, “A Survey on Nongeostationary Satellite Systems: The Communication Perspective,” *IEEE Communications Surveys and Tutorials*, vol. 25, no. 1, pp. 101–132, 2023.
- [16] MSc. Antonio Cassiano Julio Filho, “A proposal an innovative Framework for the Conception of the Ground Segment of Space Systems.,” 2020.
- [17] Ervin Nurdiansyah, “Analisa Redaman Hujan Pada Frekuensi C-Band Dan Ku-Band Untuk Komunikasi Vsat-Tv Pada Daerah Tropis,” 2017.
- [18] Z. Qu, G. Zhang, H. Cao, and J. Xie, “LEO Satellite Constellation for Internet of Things,” *IEEE Access*, vol. 5, pp. 18391–18401, Aug. 2017.
- [19] Mark K. Barkley, “Low Earth Orbit (LEO) Satellite Feasibility Report,” 2023.
- [20] A. M. Marziani *et al.*, “MEO Satellite Ka-band Receiving Stations for Tropospheric Propagation Impairment Analysis: Design, Architecture and Preliminary Measurements,” in *15th European Conference on Antennas and Propagation, EuCAP 2021*, Institute of Electrical and Electronics Engineers Inc., Mar. 2021.

- [21] T. Löffler *et al.*, “Research and Observation in Medium Earth Orbit (ROMEO) with a cost-effective microsatellite platform,” 2021.
- [22] C. Wang, D. Bian, S. Shi, J. Xu, and G. Zhang, “A Novel Cognitive Satellite Network with GEO and LEO Broadband Systems in the Downlink Case,” *IEEE Access*, vol. 6, pp. 25987–26000, Apr. 2018.
- [23] P. Abbasrezaee and A. Saraaeb, “System analysis and design of the geostationary earth orbit all-electric communication satellites,” *Journal of Aerospace Technology and Management*, vol. 13, 2021.
- [24] M. M. Kurnaz, S. Türken, A. K. Hayal, M. R. Elsayed, and E. E. Juraev, “Inter-satellite optical wireless communication (Is-OWC) trends: a review, challenges and opportunities Inter-satellite optical wireless communication (Is-OWC) trends: a review, challenges and opportunities Keywords Abstract Is-OWC system Advanced modulation Orbits Challenges and opportunities Is-OWC applications,” 2024.
- [25] M. Dmytryszyn, M. Crook, and T. Sands, “Lasers for Satellite Uplinks and Downlinks,” *Sci*, vol. 3, no. 1, Mar. 2021.
- [26] I. A. Alimi and P. P. Monteiro, “Revolutionizing Free-Space Optics: A Survey of Enabling Technologies, Challenges, Trends, and Prospects of Beyond 5G Free-Space Optical (FSO) Communication Systems,” Dec. 01, 2024.
- [27] H. C. Lim, J. U. Park, M. Choi, C. S. Choi, J. D. Choi, and J. Kim, “Performance Analysis of DPSK Optical Communication for LEO-to-Ground Relay Link Via a GEO Satellite,” *Journal of Astronomy and Space Sciences*, vol. 37, no. 1, pp. 11–18, 2020.
- [28] L. Flannigan, L. Yoell, and C. Q. Xu, “Mid-wave and long-wave infrared transmitters and detectors for optical satellite communications - A review,” Apr. 01, 2022.
- [29] C. S. Yan, Y. W. Chen, H. M. Yang, and E. Ahokas, “Optical spectrum analyzers and typical applications in astronomy and remote sensing,” Aug. 01, 2023.

- [30] A. K. Atieh and M. Raytchev, "Optical communication system (OptiSystem) software enabling remote education and teaching," *SPIE-Intl Soc Optical Eng*, Jun. 2023.
- [31] H. M. El-Hageen, H. M. El-Hageen, A. M. Alatwi, and A. N. Z. Rashed, "RZ Line Coding Scheme with Direct Laser Modulation for Upgrading Optical Transmission Systems," *Open Engineering*, vol. 10, no. 1, pp. 546–551, Jan. 2020.
- [32] G. Ibram Zuhdy, K. Sujatmoko, and D. M. Saputri, "Perancangan Dan Analisis Sistem Komunikasi Free Space Optic Pada Telkom University Dan Pt Telkomsel Regional Jawa Barat Design And Analysis Of Free Space Optic Communication Systems In Telkom University And Pt. Telkomsel Regional Jawa Barat."
- [33] B. Murtianta, D. Susilo, R. Salenda, and U. Kristen Satya Wacana, "Pemancar Modulasi Frekuensi dengan Modul GRF-3300," 2018.
- [34] M. Vanzi, "Optical gain in commercial laser diodes," *Photonics*, vol. 8, no. 12, Dec. 2021.
- [35] "Analysis of Atmospheric Effects on the Space-to-Ground Laser Communication Channel," *Universal Researchers*, Aug. 2017.
- [36] Toyoshima Morio, Kuri Tosiaki, Klaus Werner, Toyoda Masahiro, Takenaka Hideki, and Shoji yozo, "Overview of Laser communication System for the NICT Optical Ground Station and Laser Communication Experiments on Ground-to-Satellite Links," 2012.
- [37] C. D. Pradini, K. Sujatmoko, and B. Pamukti, "Performansi Perubahan Synchronous Transport Module Pada Cakupan Visible Light Communication Performance Of Changes In Synchronous Transport Module On Coverage In Visible Light Communication."
- [38] "Panjang Gelombang, <https://id.ftxsolution.com/info/what-is-the-wavelength-of-an-optical-fiber-51225141.html>".
- [39] W. H. Kim, "Bit Error Performance Analysis of Intensity and Pulse Modulation for Satellite Laser Communications," 2019.

- [40] D. Purnomo and A. Bagas Ansori, “Perancangan Oscilloscope dengan Software LabVIEW dengan Penerapan Filter Infinite Impulse Response Untuk Meningkatkan Kualitas Signal Sebagai Dasar Pengembangan Sistem Engine Control Unit,” *Borobudur Engineering Review*, vol. 4, no. 01, pp. 56–64, Jul. 2024.
- [41] S. Marcellino, H. B. Seta, and W. Widi, “Analisis Forensik Digital Recovery Data Smartphone pada Kasus Penghapusan Berkas Menggunakan Metode National Institute Of Justice (NIJ),” 2023.
- [42] Rima Fitria Adiati, “Analisis Parameter Signal To Noise Ratio Dan Bit Error Rate Dalam Backbone Komunikasi Fiber Optik Segmen Lamongan-Kebalen,” 2017.