

DAFTAR PUSTAKA

- [1] Anjasman, “Pemanfaatan Data Radar Cuaca Untuk Membuat Peringatan Dini Cuaca Secara Spasial Menggunakan Metode K-Means Cluster,” Oct. 2023. [Online]. Available: <https://www.ejournal.unib.ac.id/index.php/nmj>
- [2] M. F. Manalu, M. Wildan, and M.Faisal Yoga Dewantara, “Rancangan Antena *Microstrip Rectangular Patch* Dengan Tambahan Slot Untuk Aplikasi Antena Cuaca,” *Jurnal Rekayasa Elektro Sriwijaya*, vol. 5, no. 2, 2024.
- [3] E. Wardoyo, “Analisis Interferensi Frekuensi Radar Cuaca C-Band di Indonesia,” *Jurnal Telekomunikasi dan Komputer*, vol. 5, no. 2, p. 163, Feb. 2017, doi: 10.22441/incomtech.v5i2.1139.
- [4] S. R. Emadian and C. Ghobadi, “*Enhanced Double Negative Metamaterial Microstrip Antenna: Bandwidth, Gain Improvement, and Size Reduction for Radar Applications*,” *IEEE Access*, vol. 20, Nov. 2024, doi: 10.1109/ACCESS.2024.3498453.
- [5] H. R. Fakhriannur, Irfan, and S. Karim, “Analisis Interferensi Frekuensi 5600 MHz Pada Radar Cuaca BMKG (Studi Kasus di Stasiun Klimatologi Kelas I Banjarbaru),” 2020.
- [6] S. Dahsan, A. A. Anandari, A. A. Lestari, R. Agus, and G. Gultom, “Optimalisasi Penggunaan Radar Maritim untuk Pengawasan dan Deteksi Dini dalam Konteks Pertahanan Maritim,” *Journal on Education*, vol. 06, no. 02, 2024.
- [7] K. Tri Cahyani, L. Olivia Nur, and H. Hian Ryanu, “Perancangan Antena Metamaterial *Patch Circular* Untuk Teknologi 5G Dengan CSRR Pada Frekuensi 3.5 GHz,” *Alinier Jurnal*, vol. 4, no. 1, pp. 37–47, May 2023, [Online]. Available: www.elektro.itn.ac.id
- [8] R. Rufaidah, A. Adya P, and R. Anwar, “Perancangan Antena Mikrostrip Array Pada Frekuensi X-Band Untuk Aplikasi Radar Cuaca,” *e-Proceeding of Engineering*, vol. 7, no. 2, p. 3830, Aug. 2020.

- [9] H. Madiawati, R. Rahmansyah, and A. B. Simanjuntak, “Antena Mikrostrip Multilayer Parasitik pada Frekuensi C Band Radar Cuaca,” *ELKOMIKA: Jurnal Teknik Energi Elektrik, Teknik Telekomunikasi, & Teknik Elektronika*, vol. 11, no. 4, p. 933, Oct. 2023, doi: 10.26760/elkomika.v11i4.933.
- [10] Z. Sokol, J. Szturc, J. Orellana-Alvear, J. Popová, A. Jurczyk, and R. Céleri, “*The Role of Weather Radar in Rainfall Estimation and Its Application in Meteorological and Hydrological Modelling —A review*,” Feb. 01, 2021, MDPI AG. doi: 10.3390/rs13030351.
- [11] L. Widomurti and D. K. Suswantoro, “Efektifitas Elevasi dan Produk Terbaik Estimasi Curah Hujan Radar Cuaca Berdasarkan Klasifikasi Awan,” *Jurnal Widya Climago*, vol. 2, no. 2, pp. 29–37, May 2020.
- [12] C. A. Balanis, *Antenna theory analysis and design*, 3rd ed. John Wiley & Sons, Inc., 2005. [Online]. Available: www.copyright.com.
- [13] R. Yuwono, L. Julianto, Moch. A. Chiron, and A. Purnowidodo, “Perancangan Dimensi Antena *Ultrawide Band (Rugby Ball)* yang Paling Efektif untuk Monostatic Microwave Radar,” *TEKNO*, vol. 8, Aug. 2007.
- [14] M. M. Rahman, Y. Yang, and S. Dey, “*Application of Metamaterials in Antennas for Gain Improvement: A Study on Integration Techniques and Performance*,” *IEEE Access*, vol. 13, pp. 49489–49503, Mar. 2025, doi: 10.1109/ACCESS.2025.3552023.
- [15] T. J. Cui, D. R. Smith, and R. Liu, *Metamaterials: Theory, design, and applications*. Springer US, 2010. doi: 10.1007/978-1-4419-0573-4.
- [16] K. Quzwain, A. Ismail, and A. Sali, “*Octagon Fractal Microstrip Yagi Antenna with a Combined DNG And DPS Layer Structure*,” *Microw Opt Technol Lett*, vol. 59, pp. 1988–1993, Jan. 2017, doi: 10.1002/mop.30666.
- [17] M. Afkarulislam and H. Wijanto, “Perancangan dan Realisasi Antena Reflektor Parabola dengan *Feed Point* Mikrostrip untuk Stasiun Bumi Satelit GEO-KOMPSAT-2A,” *e-Proceeding of Engineering*, vol. 8, no. 5, p. 5368, Oct. 2021.

- [18] Nasrul, “Pembuatan Antena Reflektor Parabola Lingkaran untuk Penerima Sinyal Televisi pada Jalur UHF,” *POLI REKAYASA*, vol. 13, no. 2, Apr. 2018.
- [19] E. Wardoyo, “Analisis Interferensi Frekuensi Radar Cuaca C-Band di Indonesia,” May 2014, [Online]. Available: www.radar.bmkg.go.id/bmkg2
- [20] Irvan, “Industrial, Scientific, and Medical (ISM) Bands dan Unlicensed National Information Infrastructure (UNII) Bands,” WordPress.com. Accessed: Nov. 07, 2024. [Online]. Available: <https://irvankblog.wordpress.com/industrial-scientific-and-medical-ism-bands-dan-unlicensed-national-information-infrastructure-unii-bands/>
- [21] E. Kusumawardhani, L. S. A. Putra, I. Mawaldi, A. Kurniawan, and W. Kurnawan, “Enhancing Monitoring Systems with Interference-handling Radio Frequency Direction Finding: BMKG C-Band Weather Radar in West Kalimantan Indonesia Case Study,” *International Journal of Electrical and Computer Engineering*, vol. 15, no. 1, pp. 414–424, Feb. 2025, doi: 10.11591/ijece.v15i1.pp414-424.
- [22] Munawar, “Antena Bowtie dengan Reflektor Parabola untuk Layanan Broadband Wireless Access,” *J Teknol*, vol. 23, no. 1, pp. 41–46, Apr. 2023.
- [23] H. Wasel and Z. Guoping, “Enhancing 5G Patch Array Antenna Gain Using DNG Metamaterial,” *International Journal of Energy Engineering*, vol. 8, no. 4, pp. 93–96, 2018, doi: 10.5923/j.ijee.20180804.02.
- [24] W. N. Hamid, “Studi Perancangan dan Eksperimental Antena Frekuensi 5,8 GHz Teknik Log periodic Array dengan penambahan Metamaterial untuk Aplikasi Energy harvesting,” 2024.
- [25] S. Hossain, Md. S. Rana, and Md. M. Rahman, “Design and Analysis of Inverted E-Shaped Slotted Patch Microstrip Antenna for Multiband Applications,” in *Data Engineering and Applications*, vol. 1, J. Agrawal,

- S. Sharma, R. K. Shukla, and C.-S. Shieh, Eds., Springer, 2024, pp. 385–399. doi: 10.1007/978-981-97-2451-2_26.
- [26] M. S. Rana *et al.*, “For Wireless Applications, Design and Analysis of Patch Antenna At 2.45 Ghz,” *Telkomnika (Telecommunication Computing Electronics and Control)*, vol. 22, no. 4, pp. 799–811, Aug. 2024, doi: 10.12928/TELKOMNIKA.v22i4.25751.
- [27] M. S. Rana and M. M. R. Smieeee, “Design and Analysis of Microstrip Patch Antenna for 5G Wireless Communication Systems,” *Bulletin of Electrical Engineering and Informatics*, vol. 11, no. 6, pp. 3329–3337, Dec. 2022, doi: 10.11591/eei.v11i6.3955.
- [28] M. T. Guneser, C. Seker, M. I. Guler, N. L. Fitriyani, and M. Syafrudin, “Efficient 5.8 Ghz Microstrip Antennas for Intelligent Transportation Systems: Design, Fabrication, And Performance Analysis,” *Mathematics*, vol. 12, no. 8, p. 1202, Apr. 2024, doi: 10.3390/math12081202.
- [29] A. G. Ambekar and A. A. Deshmukh, “E-Shape Microstrip Antenna for Dual Frequency WLAN Application,” *Progress In Electromagnetics Research C*, vol. 104, pp. 13–24, 2020.
- [30] C. Maulana, D. A. Nurmantris, and Y. Wahyu, “Perancangan dan Realisasi Antena Double-Ridged Horn untuk Standar Pengukuran Antena”.
- [31] Qian. Xu and Yi. Huang, *Anechoic and Reverberation Chambers: Theory, Design, and Measurements*. John Wiley & Sons Ltd, 2019.
- [32] Munawar, Muhammad, Eliyani, and Hanafi, “Analisis Multi Refleksi Ruangan Lapisan Busa pada Spektrum Frekuensi X Band,” *Proceeding Seminar Nasional Politeknik Negeri Lhokseumawe*, vol. 7, no. 1, pp. 95–100, Mar. 2024.
- [33] Rahman Dzul, “Desain dan Analisis Kinerja Antena Reflektor,” Penguin Group US, 2024.
- [34] S. Munziah, I. M. P. B., and M. P. K. Praja, “Analisis Pola Radiasi dan Gain pada Antena Cassegrain dengan Frekuensi C-Band,” *Journal of*

Telecommunication Electronics and Control Engineering (JTECE), vol. 6, no. 2, pp. 152–162, Jul. 2024, doi: 10.20895/jtece.v6i2.1212.

- [35] T. Firdaus, D. Suryadi, F. T. P. W., and F. Imansyah, “Analisis Interferensi Frekuensi Radio Radar Cuaca Badan Meteorologi Klimatologi dan Geofisika (BMKG) di Kalimantan Barat,” *Journal of Electrical Engineering, Energy, and Information Technology (J3EIT)*, vol. 7, no. 2, Jul. 2019, doi: <https://doi.org/10.26418/j3eit.v7i2>.