

DAFTAR PUSTAKA

- [1] Institute of Electrical and Electronics Engineers. Region 8, Institute of Electrical and Electronics Engineers., and Vysoké učení technické v Brně. Faculty of Electrical Engineering and Communication, *2020 43rd International Conference on Telecommunications and Signal Processing (TSP) : July 7-9, 2020, Milan, Italy.*
- [2] Itu-r, “Minimum requirements related to technical performance for IMT-2020 radio interface(s) M Series Mobile, radiodetermination, amateur and related satellite services,” 2017. [Online]. Available: <http://www.itu.int/ITU-R/go/patents/en>
- [3] A. Hikmaturokhman, K. Ramli, and M. Suryanegara, “Indonesian Spectrum Valuation of 5G Mobile Technology at 2600 MHz, 3500 MHz, and 26 GHz and 28 GHz,” *Journal of Communications*, vol. 17, no. 4, pp. 294–301, Apr. 2022, doi: 10.12720/jcm.17.4.294-301.
- [4] Biro Humas Kementerian Kominfo, “Menkominfo Tegaskan Frekuensi 5G di Indonesia Tak Ganggu Penerbangan,” Jan. 19, 2019. https://www.kominfo.go.id/content/detail/39470/siaran-pers-no-14hmkominfo012022-tentang-menkominfo-tegaskan-frekuensi-5g-di-indonesia-tak-ganggu-penerbangan/0/siaran_pers (accessed Jan. 10, 2023).
- [5] I. Surjati, *Antena Mikrostrip: Konsep dan Aplikasinya*. Penerbit Universitas Trisakti, 2010.
- [6] M. Anthoni, R. S. Asthan, A. Pascawati, D. Maryopi, and M. R. K. Aziz, “Perancangan dan Simulasi Antena Mikrostrip MIMO 4×4 Rectangular Patch dengan Double U-Slot dan DGS pada Frekuensi 26 GHz untuk Aplikasi 5G,” *Journal of Science and Applicative Technology*, vol. 5, no. 2, p. 371, Jul. 2021, doi: 10.35472/jsat.v5i2.336.
- [7] S. F. Maharimi, M. F. Abdul Malek, M. F. Jamlos, S. C. Neoh, and M. Jusoh, “Impact of Spacing and Number of Elements on Array Factor,” *Progress In Electromagnetics Research Symposium Proceedings*, p. 1550, Mar. 2012,
- [8] E. Sandi, W. Djatmiko, R. K. Putri “Desain U-slot Ganda untuk Meningkatkan Bandwidth Antena MIMO 5G Millimeter-wave,” *ELKOMIKA: Jurnal Teknik Energi Elektrik, Teknik Telekomunikasi, & Teknik Elektronika* vol. 8, no. 1, p. 150, Jan. 2020.

- [9] F. W. Ardianto, S. Renaldy, F. F. Lanang, and T. Yunita, “Desain Antena Mikrostrip Rectangular Patch Array 1X2 dengan U-Slot Frekuensi 28 GHz,” *ELKOMIKA: Jurnal Teknik Energi Elektrik, Teknik Telekomunikasi, & Teknik Elektronika*, vol. 7, no. 1, p. 43, Jan. 2019,
- [10] Institute of Electrical and Electronics Engineers. Bangladesh Section, IEEE Region 10, and Institute of Electrical and Electronics Engineers, *2020 IEEE Region 10 Symposium (TENSYP) : 5-7 June 2020, Dhaka, Bangladesh*.
- [11] U. Venkateshkumar, S. Kiruthiga, H. Mihitha, K. Maheswari, and M. Nithiyasri, “Multiband Patch Antenna Design for 5G Applications,” in *Proceedings of the 4th International Conference on Computing Methodologies and Communication, ICCMC 2020*, Mar. 2020, pp. 528–534. doi: 10.1109/ICCMC48092.2020.ICCMC-00098.
- [12] M. F. Ahmed, M. H. K. and A. Z. Md. T. Islam, “Effect of the substrate material and thickness on the performance of the Rectangular Patch Microstrip UWB Antenna,” *SSRG International Journal of Recent Engineering Science*, vol. 8, no. 4, p. 15, Jul. 2021,
- [13] V. Bhanupriya, N. Brinda, H. N. Jyothi, and P. K. Desai, “Mutual Coupling Analysis of 2x2 MIMO Antenna Using Defected Ground Structure at Millimeter Wave,” in *Proceedings of the 2022 3rd International Conference on Intelligent Computing, Instrumentation and Control Technologies: Computational Intelligence for Smart Systems, ICICICT 2022*, 2022, pp. 357–361. doi: 10.1109/ICICICT54557.2022.9917955.
- [14] S. Ahmadi, *5G NR: Architecture, Technology, Implementation, and Operation of 3GPP New Radio Standards*. London: Mara Conner, 2019.
- [15] M. Enescu, *5G new radio : a beam-based air interface*, First. Chichester: John Wiley & Sons Ltd, 2020.
- [16] C. Johnson, *5G New Radio IN BULLETS*, First., vol. 1. 2019. [Online]. Available: www.Sg-bullets.com
- [17] P. Russer, *Electromagnetics, Microwave Circuit, And Antenna Design for Communications Engineering, Second Edition*, Second. Boston, London: ARTECH HOUSE, INC., 2006.

- [18] R. Garg, P. Bhartia, I. Bahl, and A. Ittipiboon, *Microstrip Antenna Design Handbook*. Norwood: ARTECH HOUSE, INC., 2001.
- [19] F. K. Lee and M. K. Luk, *Microstrip Patch Antennas*, First. London, Singapore: Imperial College Press, 2011.
- [20] C. A. Balanis, *ANTENNA THEORY ANALYSIS AND DESIGN THIRD EDITION*, Third. Hoboken: A JOHN WILEY & SONS, INC, 2005. [Online]. Available: www.copyright.com.
- [21] K. Fujimoto, *Mobile Antenna Systems Handbook Third Edition*, Third. Norwood: ARTECH HOUSE, INC., 2008.
- [22] H. Q. Ngo and Linköpings universitet. Institutionen för systemteknik., *Massive MIMO Fundamentals and System Designs*. Department of Electrical Engineering, Linköping University, 2015.
- [23] P. Y. Shendi, “Desain Antena Mikrostrip *Rectangular Patch* dengan *Inset-feed* dan Teknik *DGS* untuk Meningkatkan *Bandwidth* pada WiFi 2,45 GHz,” *Journal Of Communications, Antennas and Propagation*, vol. 3, no. 2, pp. 145–150, Okt. 2022,
- [24] P. S. Marisa, “Pengaruh Defected Ground Structure (DGS) Geometri Vertikal terhadap Antena Mikrostrip Berbahan Material Dielektrik Artifisial,” *Industrial Research Workshop and National Seminar*, vol. 3, no. 2, pp. 638–644, Ags. 2021,
- [25] D. K. Pharta, “*Return Loss and Bandwidth Enhancement of Microstrip Antenna using Defected Ground Structure (DGS)*,” *International Conference on Signal Processing and Integrated Networks (SPIN)*, pp. 25–29, Ags. 2015,
- [26] A. Corporation, “HFSS HFSS,” Pittsburgh, Jun. 2005.
- [27] D. Houcque, “INTRODUCTION TO MATLAB FOR ENGINEERING STUDENTS,” Evanston, Jul. 2005.