

BIBLIOGRAPHY

- [1] E. C. Utsi, *Ground Penetrating Radar Theory and Praticce*. Joe Hayton, 2017, no. 224.
- [2] I. Hertl and M. Strycek, "Uwb antennas for ground penetrating radar application," in *2007 19th International Conference on Applied Electromagnetics and Communications*, Sep. 2007, pp. 1–4.
- [3] J. J. Daniels, "Ground penetrating radar fundamentals," Master's thesis, Department of Geogical Sciences, The Ohio University, 2000.
- [4] L. P. L. I. K. A. S. R.V. de Jongh, A.G. Yarovoy, "Design and analysis of new gpr antenna concepts," in *Seventh International Conf. Ground-Penetrating Radar*, 1998.
- [5] M. N. A. Karim, M. F. A. Malek, M. F. Jamlos, and N. Saudin, "Ground penetrating radar: Antenna for buried object detection," in *2013 IEEE Symposium on Wireless Technology Applications (ISWTA)*, Sep. 2013, pp. 198–201.
- [6] J. Ali, N. Abdullah, M. Y. Ismail, E. Mohd, and S. M. Shah, "Ultra-wideband antenna design for gpr applications: A review," *International Journal of Advanced Computer Science and Applications*, vol. 8, no. 7, 2017.
- [7] S. Li, D. Wang, W. Cao, and M. Li, "Design of ultra-wideband bow-tie antenna in uhf band," in *2016 11th International Symposium on Antennas, Propagation and EM Theory (ISAPE)*, Oct 2016, pp. 242–244.
- [8] Kiminami, Hirata, and Shiozawa, "Double-sided printed bow-tie antenna for uwb communications," *IEEE Antennas and Wireless Propagation Letters*, vol. 3, pp. 152–153, 2004.
- [9] Y. Tao, S. Kan, and G. Wang, "Ultra-wideband bow-tie antenna design," in *2010 IEEE International Conference on Ultra-Wideband*, vol. 1, Sep. 2010, pp. 1–3.
- [10] M. Roslee, K. S. Subari, and I. S. Shahdan, "Design of bow tie antenna in cst studio suite below 2ghz for ground penetrating radar applications," in *2011 IEEE International RF Microwave Conference*, Dec 2011, pp. 430–433.

- [11] A. S. H. F. D. Saeid KARAMZADEH, Oguz Furkan KILIC, "Bow tie antenna design for gpr application," *INTERNATIONAL JOURNAL OF ELECTRONICS AND MECHATRONICS ENGINEERING Vol.6 Num.2*, 2016.
- [12] R. Azadegan and K. Sarabandi, "Bandwidth enhancement of miniaturized slot antennas using folded, complementary, and self-complementary realizations," *IEEE Transactions on Antennas and Propagation*, vol. 55, no. 9, pp. 2435–2444, Sep. 2007.
- [13] Xu Zhang, Huiping Guo, Xueguan Liu, and Hanzhi Hu, "A broadband self-complementary printed antenna with axe shape," in *Proceedings of the 9th International Symposium on Antennas, Propagation and EM Theory*, Nov 2010, pp. 267–270.
- [14] C. Lin and C. Huang, "Self-complementary antenna for ultra-wideband applications," in *2016 IEEE 5th Asia-Pacific Conference on Antennas and Propagation (APCAP)*, July 2016, pp. 105–106.
- [15] N. Quasem, A. Rahman, and D. G. Michelson, "A self-complementary pica for uwb applications," in *2015 IEEE International Symposium on Antennas and Propagation USNC/URSI National Radio Science Meeting*, July 2015, pp. 1938–1939.
- [16] Y. A. F. Khalil H. Sayidmarie, "A planar self complementary bow-tie antenna for uwb applications," in *Progress In Electromagnetics Research C*, vol. 35, pp. 253–267, 2013.
- [17] S. Jannah, A. A. Pramudita, and Y. Wahyu, "Self-complementary bow-tie antenna design for uwb respiration system," in *2019 International Conference on Information and Communications Technology (ICOIACT)*, July 2019, pp. 237–242.
- [18] Y. S. Siahaan, "Perancangan dan realisasi antena dipole dengan pembebanan resistif dan kapasitif pada frekuensi 600 mhz," Undergraduate Thesis, Institute Teknologi Telkom, Tech. Rep., 2011.
- [19] A. Y. H. H. W. Yuyu Wahyu, Haryanto Sachrawi, "Antena spiral-dipole untuk ground penetrating radar (gpr)," *JURNAL ELEKTRONIKA DAN TELEKOMUNIKASI*, Vol. 13, No. 2., 2013.

- [20] a. Y. Z. Xueping Li, 1Jinjin Shao, “Research on resistor-loaded half-ellipse antennasystem for gpr application,” *International Journal of Antennas and Propagation*, vol. 2016 year = 2016,.
- [21] M. Desmaliasari, “Perancangan dan simulasi antena bowtie dengan pembebanan resistif untuk aplikasi ground penetrating radar (gpr),” Undergraduate Thesis, Institute Teknologi Telkom, Tech. Rep., 2011.
- [22] H. M. Jol, Ed., *Ground Penetrating Radar: Theory and Applications*. Elsevier’s Science and Technology Rights Department in Oxford,UK, 2009.
- [23] D. J. Daniels, Ed., *Ground Penetrating Radar - 2nd Edition*. The Institution of Electrical Engineering, London, United Kingdom, 2004.
- [24] R. J. P. Sihombing, “Post-processing of soil water content information for ground penetrating radar using matlab,” Undergraduate Thesis, Telkom University, Tech. Rep., 2019.
- [25] P. Cao, Y. Huang, and J. Zhang, “A uwb monopole antenna for gpr application,” in *2012 6th European Conference on Antennas and Propagation (EU-CAP)*, March 2012, pp. 2837–2840.
- [26] F. C. Commission, “Revision of part 15 of the commission’s rules regarding ultra-wideband transmission system,” Tech. Rep., 2002.
- [27] ———, “First report and order in the matter of revision of part 15 of the commission’s rules regarding ultrawideband transmission system,” Tech. Rep., 2002.
- [28] M. R. Islam, “Study and implementation of wideband bow-tie antennas,” Master’s thesis, Georgia Southern University, 2017.
- [29] V. N. Kai Chang, Inder Bahl, *RF and Microwave Circuit and Component Design for Wireless System 1st*. Wiley-Interscience, 2002.
- [30] Y. Mushiake, “Self-complementary antennas,” *IEEE Antennas and Propagation Magazine*, vol. 34, no. 6, pp. 23–29, Dec 1992.
- [31] Pu Xu, K. Fujimoto, and Shiming Lin, “Performance of quasi-self-complementary antenna using a monopole and a slot,” in *IEEE Antennas and Propagation Society International Symposium (IEEE Cat. No.02CH37313)*, vol. 2, June 2002, pp. 464–467 vol.2.

- [32] Y. A. F. Khalil H. Sayidmarie¹, “A planar self-complementary bow-tie antenna for uwb applications,” *Progress In Electromagnetics Research C*, Vol. 35, 2013.
- [33] *Self-Complementary Antennas : Principle of Self-Complementarity for Constant Impedance*. Springer-Verlag London, 1996.
- [34] Xiaoxing Yin, Zhiguo Su, Wei Hong, and Tie Jun Cui, “A delay-line loaded tapered slot antenna,” in *2005 IEEE Antennas and Propagation Society International Symposium*, vol. 1B, July 2005, pp. 422–425 vol. 1B.
- [35] T. Wu and R. King, “The cylindrical antenna with nonreflecting resistive loading,” *IEEE Transactions on Antennas and Propagation*, vol. 13, no. 3, pp. 369–373, May 1965.
- [36] Y. Yin, L. Liu, and M. Zhang, “A tapered slot antenna loaded with resistive delay lines,” in *2011 IEEE International Symposium on Antennas and Propagation (APSURSI)*, July 2011, pp. 3327–3329.
- [37] R. L. d. S. A. N. I. X. L. Travassos, S. L. Avila, “A review of ground penetrating radar antenna design and optimization,” *Journal of Microwaves, Optoelectronics and Electromagnetic Applications*, Vol. 17, No. 3, 2018.
- [38] A. Munir, R. B. V. B. Simorangkir, and F. Kurniawan, “Late-time ringing characterization of cavity-backed uwb printed monopole antenna,” in *2017 IEEE Conference on Antenna Measurements Applications (CAMA)*, Dec 2017, pp. 419–422.