

References

- Aakash Bansal , Chinthana J. Panagamuwa , and William G. Whittow , (2022) "Millimeter-Wave Beam Steerable Slot Array Antenna Using an Inter-Digitated Capacitor Based Corrugated SIW" *IEEE Transaction on Antenna and Propagation*, vol.70, pp. 11761-11770, Dec 2022.
- Aakash Bansal , Chinthana J. Panagamuwa , and William G. Whittow , (2024) "State-of-the-Art Millimeter-Wave Beam Steering Antennas for Beyond 5G and 6G Networks" *IEEE Antenna & Propagation Magazine*, pp. 40-51, Oct 2024.
- Alexander A. Konovalenko, Peter L. Tokarsky , Igor N. Bubnov, Serge N. Yerin, (2017) "SNRs of Two Active Antenna Designs: Inverted V vs Horizontal Dipole" *2017 XI International Conference on Antenna Theory and Techniques (ICATT)*, Kyiv, Ukraine, pp. 224-227, 24-27 May 2017.
- Ali H Ramadan, Mohammed Al-Huaaeini, Karim Y. Kabalan (2012) "A narrowband frequency-tunable antenna for cognitive radio applications" in *6th European Conference on Antennas and Propagation (EUCAP)*, 26-30 March 2012.
- Ben A. Witvliet, Erik van Maanen , Albert J. Westenberg (2015) "Near Vertical Incidence Skywave Propagation: Elevation Angles and Optimum Antenna Height for Horizontal Dipole Antennas" *IEEE transaction on Antennas and Propagation Magazine* Volume: 57, Issue: 1, PP 129-146 24 Feb. 2015
- Chao Liu, Yongfeng Li, Tonghao Liu, Yajuan Han, Jiafu Wang, Shaobo, (2022) "Polarization Reconfigurable and Beam-Switchable Array Antenna Using Switchable Feed Network" *IEEE Access*, vol 10, pp. 29032-29039, Mar 2022.
- Chia-Chan Chang, Ruey-Hsuan Lee, Ting-Yen Shih, (2010) "Design of a Beam Switching/Steering Butler Matrix for Phased Array System", *IEEE Trans. Antennas Propag.*, vol. 58, no. 2, pp. 367-74, Feb 2010.
- Constantine A. Balanis, "Antenna Theory Analysis and Design, (2005)" 3rd ed., New Jersey, John Wiley & Sons, 2005, pp.172.
- Courage Mudzingwa, Albert Chawanda (2018) "Radio Propagation Prediction for HF Communications". *Communications*. Vol. 6, No. 1, 2018, pp. 5-12.
- Evizal Abdul Kadir, Hitoshi Irie, Sharul Kamal Abdul Rahim, Yudhi Arta, Sri Listia Rosa, (2018) "Reconfigurable MIMO Antenna for Wireless Communication Based on Arduino Microcontroller" in *Proceedings of IEEE International RF and Microwave Conference Penang, Malaysia*, pp. 119-122, 17-19 December 2018.
- H.Greenberg,S. Krevsky,G. Bumiller (2003) " Optimum HF prediction" :*IEEE IRE Transactions on Antennas and Propagation* ,Volume: 10, Issue: 3 PP 325-327 06 Jan 2003
- H. Scott and V. F. Fusco, (2000) "Beam steering using a single dipole antenna including a capacitive load" *IEEE High Frequency Postgraduate Student Colloquium*, Dublin, Ireland, pp. 12-17, 7-8 September 2000
- H.Scott and V. F. Fusco, (2000) "Beam steering using a single dipole antenna including a capacitive load" in *IEEE High Frequency Postgraduate Student Colloquium*, Dublin, Ireland, pp. 12-17, 7-8 September 2000.
- H.Scott and V. F. Fusco, (2000) "Beam steering using a single dipole antenna including a capacitive load" *IEEE High Frequency Postgraduate Student Colloquium*, Dublin, Ireland, pp. 12-17, 7-8 September 2000
- J Bong Ko, Dongho Kim, (2017) "A Wideband Frequency-Tunable Dipole Antenna Based on Antiresonance Characteristics" *IEEE Antenna and Wireless Propagation Letters*, vol. 16, pp. 3067-3070, 2017.
- Jia Min Wen , Chang Yu, Yuan Xin Li , Yong Mei Pan , and Shao Yong Zheng, (2023) "A Compact Dual-Beam Steering Antenna Array Based on a Simplified Beamforming Network" *IEEE Transaction on Antenna and Propagation*, vol.71, pp.7620-7625, Sep 2023
- Jiateng Chen, Yunqi Zhang, Xuping Li, (2023) "A low-cost end-fire beam steering antenna array based on varactor diode" in *International Conference on Microwave and Millimeter Wave Technology (ICMMT)*, 2023.

- Jie Liu, Jian-Ying Li, Rui Xu, Shi-Gang Zhou (2019) "A Reconfigurable Printed Antenna With Frequency and Polarization Diversity Based on Bow-Tie Dipole Structure" *IEEE Trans. Antennas Propag.*, vol. 67, no. 12, pp. 7628-7632, Dec 2019.
- Ju-Ilk Oh, ByungKuon Ahn, Hye-Won Jo, In-June Hwang, Jong-Won Yu (2019) "Beam Steerable Dipole Antenna Using Varactor Diodes for WiMAX Application" in *13th European Conference on Antennas and Propagation, EuCAP*, 2019.
- Kazimierz "Kai" Siwiak, (2011) "An Optimum Height for an Elevated HF Antenna " QEX -PP 32-38 May/June 2011
- Kibeom Park, Jingon Joung, Sungjoon Lim and Han Lim Lee, (2019) "A Compact Crossed Inverted-V Antenna with a Common Reflector for Polarization Diversity in the IoT" *Electronics* 2019, 8, pp. 637,06 June 2019.
- Muhammad Usman Memon, Sungjoon Lim, (2015) "Frequency-Tunable Compact Antenna Using Quarter-Mode Substrate Integrated Waveguide" *IEEE Antenna and Wireless Propagation Letters*, Vol. 14, PP. 1606-1609, 2015.
- R Colella, Luigi Spedicato, Laura Laqintana, Luca Catarinucci, (2023) "Inertially Controlled Two-Dimensional Phased Arrays by Exploiting Artificial Neural Networks and Ultra-Low-Power AI-Based Microcontrollers", *IEEE Access*, vol.11, pp. 23474-23484, March 2023.
- R. Shukla, S. Mukherjee, S. Yadav, "Digitally Controlled Beam-Steerable Printed Dipole Antenna" accepted and published as early access on 13 Jan 25 in *IEEE Open Journal of Antennas and Propagation*
- R. Shukla, S. k. Yadav, S. Mukherjee (2019) "Frequency Tunable Inverted-V HF Dipole Antenna by Channel Extension Technique" *IEEE Indian Conference on Antenna & Propagation, IEEE InCAP-2019*, Ahmedabad 19-22 Dec19
- Rajesh Shukla, Idury Satya Krishna, Naman Baghel, Sourav Ghosh, Soumava Mukherjee, Sandeep Kumar Yadav (2021) "Beam Steerable HF inverted V dipole antenna" in *IEEE International Symposium on Antennas and Propagation and USNC-URSI Radio Science Meeting (APS/URSI) Singapore*, 4-10 Dec. 2021.
- Rajesh Shukla, Sandeep kumar Yadav (2017) "A practical approach on frequency prediction and optimum HF antenna deployment" *IEEE Indian Antenna Week IAW 2017*, DIAT Pune (DRDO) 07 Jun 17.
- Rosa Ma Alsina-Pagès, Marcos Hervás, Ferran Orga, Joan Lluís Pijoan, David Badia and David Altadill (2016) "Physical Layer Definition for a Long-Haul HF Antarctica to Spain Radio Link" *Article Remote Sens.* 2016, 8(5), 380, 4 May 2016.
- Rubén F. M. Delgado Castillo, Ruyu Ma, and Nader Behdad (2021) "Platform-Based, Electrically-Small HF Antenna With Switchable Directional Radiation Patterns" *IEEE Trans on Antenna Propag*, vol 69, no 8, pp. 4370-4379, August 2021
- Rudi Hanb (1998) "Performance prediction methods of HF radio systems": *Geophysics journal*, Annali Di Geofisica Vol 41,N, 5-6, Nov-Dec 1998
- S. V. Shynu Nair, Max J. Ammann, (2010) "Reconfigurable Antenna With Elevation and Azimuth Beam Switching" *IEEE Antennas Wireless Propagation Letters*, vol. 9, pp. 367-370, 2010.
- Shiqi Han, Zhan Wang, and Yuandan Dong, "Planar Beam-Steering Dielectric Resonator Antenna Based on Hybrid Excitation Method," *IEEE Antennas and Wireless Propagation Letters*, to be published.
- Simone Genovesi, Agostino Monorchio, Michele Borgese, Sara Pisu, and Fabio Michele Valeri, (2012) "Frequency-Reconfigurable Microstrip Antenna With Biasing Network Driven by a PIC Microcontroller" *IEEE Antenna and Wireless Propagation Letters*, vol. 11, pp. 156-159, 2012.
- Siti Nailah Mastura Zainarry, Nghia Nguyen-Trong, Christophe Fumeaux (2018), "A Frequency- and Pattern-Reconfigurable Two-Element Array Antenna," *IEEE Antennas Wireless Propag. Lett.*, Vol.17, no.4, pp.617-620, April 2018.
- S. Vellucci, M. Longhi, A. Monti, M. Barbuto (2023), D. Ramaccia, L. Stefanini, Z. H.-Zarghani, M. Khalid, A. Toscano, and F. Bilotti (2023) "Steerable Dipole Antenna through Huygens Metasurface Coating" *2023 IEEE International Symposium on Antennas and Propagation and USNC-URSI Radio Science Meeting (USNC-URSI)*
- Tapas Chakravarty, Salil Kumar Sanyal, (2000) "A novel microcontroller-programmable circular microstrip antenna" *Microwave Opt Technol Lett* 25, pp. 383-387, 2000.
- Trong Duc Nguyen, Yvan Duroc, Van Yem Vu and Tan Phu Vuong, (2012) "Frequency Reconfigurable PIFA Antenna Driven By Microcontroller" in *IEEE Fourth International Conference on Communications and Electronics (ICCE) Hue, Vietnam*, pp. 406-410, 01-03 August 2012
- VOACAP (Voice of America Coverage Analysis Program) "HF Point to Point Prediction" www.vocap.com

- Wenquan Cao, Bangning Zhang, Aijun Liu, Tongbin Yu, Daosheng Guo, Kegang Pan, (2019) "A Reconfigurable Microstrip Antenna With Radiation Pattern Selectivity and Polarization Diversity" *IEEE Antennas Wireless Propag. Lett.*, Vol.11, 2019.
- Xiangbin Miao , WanWan , Zhu Duan , Wen Geyi, (2019) "Design of Dual-Mode Arc-Shaped Dipole Arrays for Indoor Base-Station Applications" *IEEE Antennas Wireless Propagation Lett.*, vol. 18, No 4, pp. 752-756, Apr 2019.
- Xiaowei Cao , Changjiang Deng , and Kamal Sarabandi , (2022) "Fixed-Frequency Beam Steering Leaky-Wave Antenna With Integrated 2-Bit Phase Shifters" *IEEE Transaction on Antenna and Propagation*, vol.70, pp. 11246-11251, Nov 2022.
- Yongtao Jia , Guangsheng Jiang, Ying Liu ,and Yichen Zhong(2022)," Beam Scanning for Dual-Polarized Antenna With Active Reflection Metasurface" *IEEE AWPL*, vol. 21, no. 9 pp 1722-1725, , September2022
- Yuan Ji , Lei Ge , Jianpeng Wang , Quangang Chen, Wen Wu, Yujian Li, (2019) "Reconfigurable Phased-Array Antenna Using Continuously Tunable Substrate Integrated Waveguide Phase Shifter" *IEEE Trans. Antennas Propag.*, Vol. 67, No. 11, pp. 6894 -6908, November 2019.
- Ziheng Ding , Ronghong Jin, Junping Geng , Weiren Zhu , Xianling Liang(2019) "Varactor Loaded Pattern Reconfigurable Patch Antenna With Shorting Pins", *IEEE Trans. Antennas Propag.*, vol. 67, no. 10, pp. 6267-6277, October 2019.