

REFERENCE

- [1] Marco Scaioni, *Modern Technologies for Landslide Monitoring and Prediction*, Springer Natural Hazard, 2014.
- [2] K. A. C. de Macedo, F. L. G. Ramos, C. Gaboardi, J. R. Moreira, F. Vissirini and M. S. da Costa, "A Compact Ground-Based Interferometric Radar for Landslide Monitoring: The Xerém Experiment," in *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, vol. 10, no. 3, pp. 975-986, March 2017, doi: 10.1109/JSTARS.2016.2640316.
- [3] Li, Cunlong & Chen, Weimin & Liu, Gang & Yan, Rong & Xu, Hengyi & Qi, Yi, "A Noncontact FMCW Radar Sensor for Displacement Measurement in Structural Health Monitoring", Vol.2015, *Sensors*. 15. 7412-7433, 10.3390/s150407412.
- [4] A A Pramudita, Dyonisius Dony and Edwar, "Non-Contacting Sensor for small Displacement and Vibration Monitoring Based on Reflection Coefficient Measurement", (*Progress In Electromagnetics Research M*, Vol. 7) p. 1–8.2018
- [5] Jochen Moll and Viktor Krozer, "Radar-based Mechanical Vibration Sensing for Structural Health Monitoring Applications: A Comparison of Radar Transceiver Measurements at 24 GHz and 100 GHz", 8th European Workshop On Structural Health Monitoring (EWSHM 2016), 5-8 July 2016, Spain, Bilbao.
- [6] Gonzalez-Aguilera, D, Gomez-Lahoz, J, Sanchez, J. "A new approach for structural monitoring of large dams with a three-dimensional laser scanner". *Sensors* 2008, 8, 5866–5883.
- [7] Dan Zhang, et.al, "FMCW Radar for Small Displacement Detection of Vital Sign Using Projection Matric Method, *International Journal of Antenna and Propagation*", Vol.2013, Article ID 571986, pp.1-5.
- [8] Jochen Moll and Viktor Krozer, "Radar-based Mechanical Vibration Sensing for Structural Health Monitoring Applications: A Comparison of Radar Transceiver

Measurements at 24 GHz and 100 GHz”, 8th European Workshop On Structural Health Monitoring (EWSHM 2016), 5-8 July 2016, Spain, Bilbao.

- [9] Lee, Yee Siong et al. “Monitoring and Analysis of Respiratory Patterns Using Microwave Doppler Radar.” IEEE journal of translational engineering in health and medicine vol. 2 1800912. 31 Oct. 2014, doi:10.1109/JTEHM.2014.2365776.
- [10] Changzhan Gu, Changzhi Li, “Assesment of Human Respiration Pattern Via Noncontact Sensing Using Doppler Multi Radar System”, Sensor, 2015 Vol.15, pp.6383-6398.
- [11] Bassem R Mahafza, Radar System Analysis and Design, CRC Press, Published June 25, 2013.
- [12] S. Pisa, E. Pittella and E. Piuizzi, "A survey of radar systems for medical applications," in IEEE Aerospace and Electronic Systems Magazine, vol. 31, no. 11, pp. 64-81, November 2016. doi: 10.1109/MAES.2016.140167.
- [13] Miquel Testar, Richard Stirling-Gallacher, “New super-resolution ranging technique for FMCW radar systems” (Proc. SPIE 8188, Millimetre Wave and Terahertz Sensors and Technology IV, 81880K, 2011.
- [14] A. V. Varavin, G. P. Ermak, A. S. Vasilev, A. P. Yevdokymov and V. V. Kryzhanovskiy, "Improvement of range resolution of FMCW autodyne radar," 2010 INTERNATIONAL KHARKOV SYMPOSIUM ON PHYSICS AND ENGINEERING OF MICROWAVES, MILLIMETER AND SUBMILLIMETER WAVES, Kharkiv, Ukraine, 2010, pp. 1-3, doi: 10.1109/MSMW.2010.5546149.
- [15] A. Chaudhari, S. Prabhu and R. Pinto, "Frequency estimator to improve short range accuracy in FMCW radar," 2015 International Conference on Advances in Computing, Communications and Informatics (ICACCI), Kochi, India, 2015, pp. 640-644, doi: 10.1109/ICACCI.2015.7275682..

- [16] B. Park, O. Boric-Lubecke and V. M. Lubecke, "Arctangent Demodulation With DC Offset Compensation in Quadrature Doppler Radar Receiver Systems," in *IEEE Transactions on Microwave Theory and Techniques*, vol. 55, no. 5, pp. 1073-1079, May 2007, doi: 10.1109/TMTT.2007.895653.
- [17] A. A. Pramudita, F. Y. Suratman, D. Arseno and E. Ali, "FMCW Radar Post Processing Method for Small Displacement Detection," 2018 IEEE International Conference on Aerospace Electronics and Remote Sensing Technology (ICARES), Bali, Indonesia, 2018, pp. 1-5, doi: 10.1109/ICARES.2018.8547073.
- [18] B. K. Park, O. Boric-Lubecke and V. M. Lubecke, "Arctangent Demodulation With DC Offset Compensation in Quadrature Doppler Radar Receiver Systems," in *IEEE Transactions on Microwave Theory and Techniques*, vol. 55, no. 5, pp. 1073-1079, May 2007.
- [19] D. Girbau, A. Lazaro, Á. Ramos and R. Villarino, "Remote Sensing of Vital Signs Using a Doppler Radar and Diversity to Overcome Null Detection," in *IEEE Sensors Journal*, vol. 12, no. 3, pp. 512-518, March 2012. doi: 10.1109/JSEN.2011.2107736
- [20] G. Vinci, S. Lindner, F. Barbon, S. Mann, M. Hofmann, A. Duda, R. Weigel, A. Koelpin "Six-Port Radar Sensor for Remote Respiration Rate and Heartbeat Vital-Sign Monitoring," in *IEEE Transactions on Microwave Theory and Techniques*, vol. 61, no. 5, pp. 2093-2100, May 2013, doi: 10.1109/TMTT.2013.2247055.
- [21] Vinci, G., et al., "Six-port microwave interferometer radar for mechanical vibration analysis," 2013 European Microwave Conference, 1599–1602, Nuremberg, 2013, doi: 10.23919/EuMC.2013.6686978
- [22] Merrill I. Skolnik, *Introduction to Radar systems* 2nd edition. 1981. McGraw-Hill Book Co. Singapore.

- [23] R. Zitouni and L. George, "Output power analysis of a software defined radio device," 2016 IEEE Radio and Antenna Days of the Indian Ocean (RADIO), Reunion, France, 2016, pp. 1-2, doi: 10.1109/RADIO.2016.7771996..
- [24] H.W. Tuttlebee, *Software Defined Radio*, JOHN WILEY AND SONS LTD, 2002.
- [25] L. K. Patton, *A GNU Radio Based Software-Defined Radar*, Master's Thesis, Wright University, April 2007.
- [26] Dunsmore, Joel P, in *Handbook of microwave component measurements: with advanced VNA techniques*, 2012, Jhon Wiley: New York, 2012.
- [27] A.A. Pramudita, A. Dharu, Ali Erfansyah, "Small displacement Detecting Method Based on Multifrequency Continuous Wave Radar System," *Journal of Physics: Conference Series*, 2–14 October 2018.
- [28] A. A. Pramudita and F. Y. Suratman, "Low-Power Radar System for Noncontact Human Respiration Sensor," in *IEEE Transactions on Instrumentation and Measurement*, vol. 70, pp. 1-15, 2021, Art no. 4005415, doi: 10.1109/TIM.2021.3087839.
- [29] J. Burki, T. Ali and S. Arshad, "Vector network analyzer (VNA) based synthetic aperture radar (SAR) imaging," *INMIC*, Lahore, Pakistan, 2013, pp. 207-212, doi: 10.1109/INMIC.2013.6731351.
- [30] Siddiq, K, Hobden, MK, Pennock, SR & Watson, RJ 2019, 'Phase Noise in FMCW Radar Systems', *IEEE Transactions on Aerospace and Electronic Systems*, vol. 55, no. 1, pp. 70-81.