**PUBLICATIONS AND PATENTS**

**Refereed Journals**

* F. Akbar and A. Mortazawi, “An integrated compact phase shifter with a single analog control,” *IEEE Microw. Compon. Lett.*, vol. 32, no. 5, pp. 410‒413, May 2022.
* F. Akbar, B. Yektakhah, H. Xu, and K. Sarabandi, “A low-complexity time-domain method for a fast and accurate measurement of Q-factor and resonant frequency of RF and microwave resonators,” *IEEE Access*, vol. 9, pp. 96478‒96486, 2021.
* F. Akbar and A. Mortazawi, “A frequency tunable 360º analog CMOS phase shifter with an adjustable amplitude,” *IEEE Trans. Circuits Syst. II (TCAS II),* vol. 64, no. 12, pp. 1427–1431, Dec. 2017.

***(Among the top 5 most viewed TCAS II papers in 2017 and 2018)***

* F. Akbar and A. Mortazawi, “Scalable phased array architectures with a reduced number of tunable phase shifters,” *IEEE Trans. Microw. Theory Techn. (TMTT)*, vol. 65, no. 9, pp. 3428–3434, Sept. 2017.

***(Among the top 10 most viewed TMTT papers in 2017)***

* F. Akbar, M. Atarodi, and S. Saeedi, “Design method for a reconfigurable CMOS LNA with input tuning and active balun,” *AEU - International Journal of Electronics and Communications*, vol. 69, no. 1, pp. 424–431, Jan. 2015.

**Conferences**

* F. Akbar and K. Gharibdoust, “An Orthogonal Pulse Amplitude Modulation Signaling for High-Speed Wireline Communications,” *IEEE Int. Symp. Circuits and Systems (ISCAS)*, Aug. 2023.
* A. S. Shabrang, A. A. Isazadeh, M. H. Tazari, A. Fatemi Mofrad, and F. Akbar, “A 0.3-V energy-efficient low-noise CMOS OTA for portable bioelectric signal acquisition systems,” *IEEE Northeast Workshop on Circuits and Systems (NEWCAS)*, July 2022.
* F. Akbar and B. Yektakhah, “360° beam steering with circular polarization based on the superposition of circular TEn1 modes,” *IEEE International Symposium on Antennas and Propagation (APS/URSI)*, Dec. 2021.
* F. Akbar and A. Mortazawi, “A K-band low-complexity modular scalable wide-scan phased array,” *IEEE MTT-S* *International Microwave Symposium (IMS)*, Aug. 2020.
* F. Akbar, B. Yektakhah, H. Xu, and K. Sarabandi, “An accurate low-cost method for Q-factor and resonance frequency measurements of RF and microwave resonators,” *IEEE International Geoscience and Remote Sensing Symposium (IGARSS)*, Sept. 2020.
* F. Akbar and A. Mortazawi, “A new integrated K-band analog vector sum phase shifter,” *IEEE  
  MTT-S* *International Microwave Symposium (IMS)*, June 2018.
* F. Akbar and A. Mortazawi, “A frequency reconfigurable 360o analog phase shifter with a constant loss,” presented at *IEEE Int. Symp. Circuits and Systems (ISCAS)-Late Breaking News*, May 2017.
* F. Akbar and A. Mortazawi, “Design of a compact, low complexity scalable phased array antenna,” *IEEE MTT-S* *International Microwave Symposium (IMS)*, May 2015.
* F. Akbar and A. Mortazawi, “Design of a scalable phased array antenna with a simplified architecture,” *IEEE European Microwave/Radar Conference (EuMC/EuRAD)*, Sept. 2015.

**Patents**

* *F. Akbar and B. Yektakhah, “Systems and methods for circular-polarized beam forming and steering based on the superposition of circular modes for communication and radar systems,” U.S. Patent, 2023.*

**Talks and Seminars**

* Three Minute Thesis (3MT) competition, *IEEE MTT-S International Microwave Symposium (IMS)*, 2020.
* Seminar on Wearable Technology in *Iranian Conference on Electrical Engineering (ICEE)*, Amirkabir University of Technology, Tehran, Iran, May 2023.