In our endeavor, we've successfully merged applied electromagnetics and integrated circuits/systems to create a cohesive research theme that has led to the development of several innovative circuits for various applications.

Our research topics include:

* Simultaneous Tx and Rx operation from both antenna and electronic viewpoints for communication and radar systems (through self and inter channel interference cancellation)
* Self-calibrated low-complexity integrated phased arrays
* Beamforming/steering based on the superposition of circular modes
* Low-power Low-complexity high-speed wireline transceivers
* Low-power compact phase shifters with independent amplitude/phase control
* Harmonic rejection mixers
* Ultra-low-phase noise and ZTC oscillators
* Energy-efficient low-noise amplifiers for portable bioelectric signal acquisition systems
* Wearable Electronics