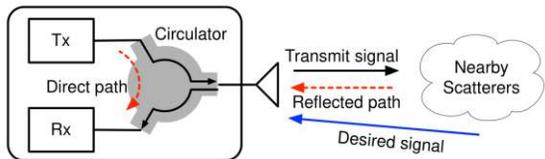


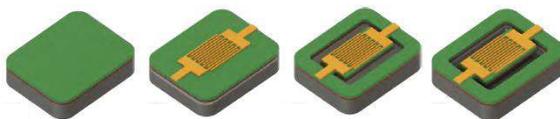
Background



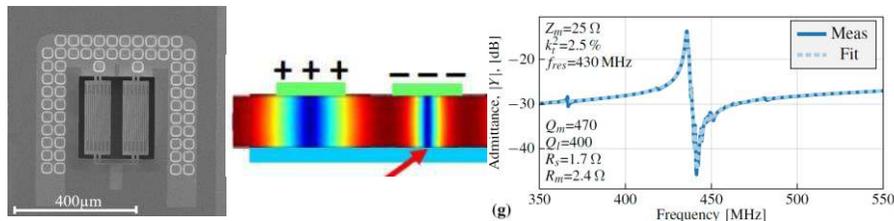
In-Band Full Duplex:

- Improved Spectral Efficiency (2x)
- Conflicting requirements for RF front-end HW
- Benchmark for emerging technologies

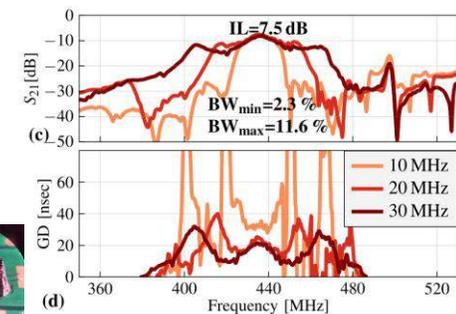
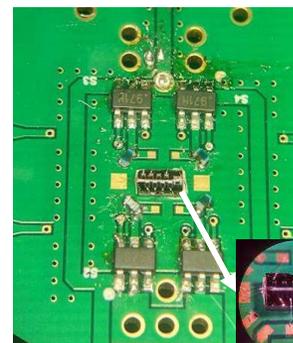
CMR ScAlN Resonators



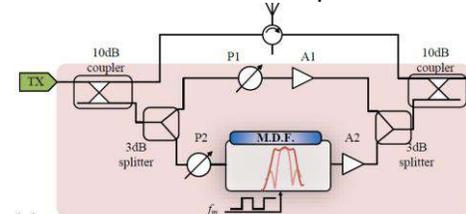
- CMOS compatible
- Two-mask fab
- Frequency-agile



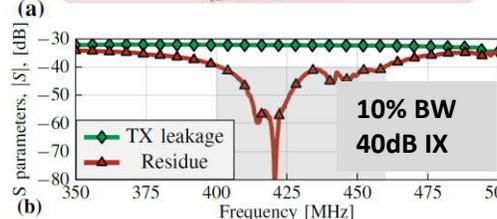
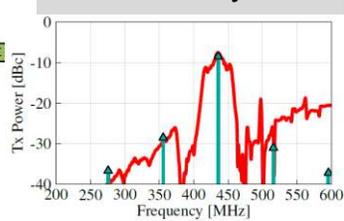
Results & Impact



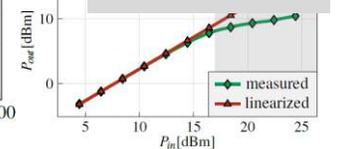
SIC cancellation experiment



>30dB CMT Rejection

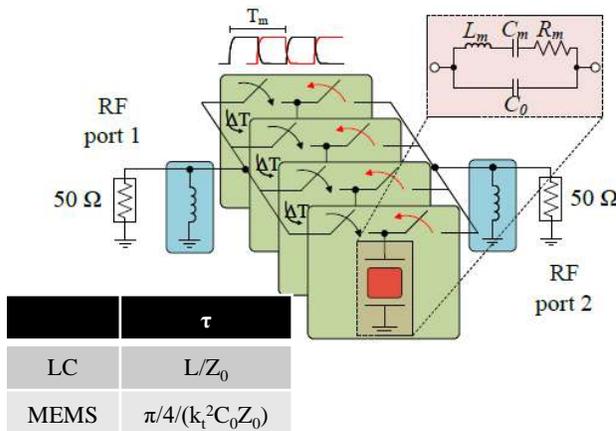
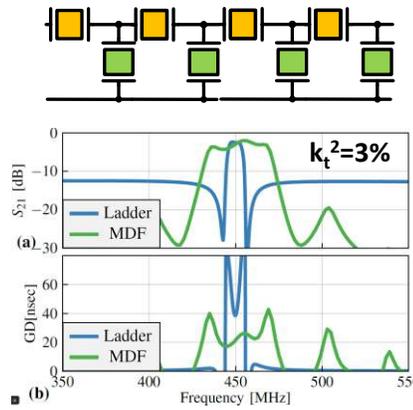
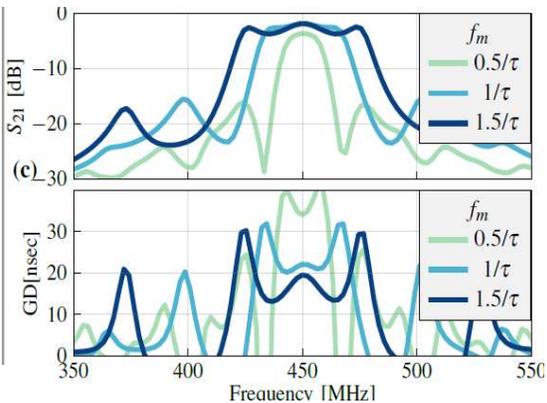


17dBm IP1dB



Methodologies

- Wideband, modulation-defined group delay
- Compares favorably with conventional microacoustic delay lines



	τ
LC	L/Z_0
MEMS	$\pi/4/(k_t^2 C_0 Z_0)$

