

## PUBLICATIONS

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### JOURNAL PAPERS

- I. Cortzen, J. Garrett, *et al.*, "Mid-IR Spectroscopy as a Tracer of the Molecular Gas in Star Forming Galaxies," submitted to *Monthly Notices of the Royal Astronomical Society*.
- J. Garrett, and E. Fear, "A New Breast Phantom with a Durable Skin Layer for Microwave Breast Imaging," *IEEE Transactions on Antennas and Propagation*, vol. 63, no. 4, pp. 1693–1700, Apr. 2015.
- J. Garrett, and E. Fear, "Average Dielectric Property Analysis of Complex Breast Tissue with Microwave Transmission Measurements," *Sensors (MDPI)*, vol. 15, no. 1, pp. 1199–1216, 2015.
- J. Garrett, and E. Fear, "Stable and Flexible Materials to Mimic the Dielectric Properties of Human Soft Tissues," *IEEE Antennas and Wireless Propagation Letters*, vol. 13, pp. 599–602, 2014.
- J. Bourqui, J. Garrett, and E. Fear, "Measurement and Analysis of Microwave Frequency Signals Transmitted Through the Breast," *International Journal of Biomedical Imaging*, vol. 2012, Article ID 562563, 11 pages, 2012.

### SELECTED CONFERENCE PROCEEDINGS

- J. Garrett, J. Leech, B. Ellison, and G. Yassin, "A  $1 \times 4$  Focal Plane Array Using 230 GHz SIS Mixers," in *The 29<sup>th</sup> International Symposium on Space Terahertz Technology*, Los Angeles, CA, Mar. 2018.
- J. Garrett, H. Rashid, V. Desmaris, V. Belitsky, and G. Yassin, "Spectral Domain Simulation of SIS Frequency Multiplication," in *The 28<sup>th</sup> International Symposium on Space Terahertz Technology*, Cologne, Germany, Mar. 2017.
- J. Garrett, F. Boussaha, C. Chaumont, B.K. Tan, and G. Yassin, "A 230 GHz Finline SIS Receiver with Width IF Bandwidth," in *The 27<sup>th</sup> International Symposium on Space Terahertz Technology*, Nanjing, China, Apr. 2016.
- J. Garrett, B.K. Tan, F. Boussaha, C. Chaumont, and G. Yassin, "A 220 GHz Finline Mixer with Ultra-Wide Instantaneous Bandwidth," in *The 26<sup>th</sup> International Symposium on Space Terahertz Technology*, Cambridge, MA, Mar. 2015.
- J. Leech, G. Yassin, B.K. Tan, Y. Zhou, J. Garrett, and P. Grimes, "An SIS Mixer Based Focal-Plane Array at 230 GHz," in *The 26<sup>th</sup> International Symposium on Space Terahertz Technology*, Cambridge, MA, Mar. 2015.
- J. Garrett, and E. Fear, "Average Property Estimation Validation with Realistic Breast Models," in *The 8<sup>th</sup> European Conference on Antennas and Propagation (EuCAP)*, The Hague, Netherlands, Apr. 2014, pp. 1279–1280.
- J. Garrett, and E. Fear, "A Time- and Temperature-Stable Complex Breast Phantom for Microwave Breast Imaging," in *The 2013 USNC-URSI Radio Science Meeting & IEEE AP-S Symposium*, Lake Buena Vista, FL, Jul. 2013, pp. 32.
- J. Garrett, J. Bourqui, and E. Fear, "Average Property Estimation of Breast Tissue: the Use of Time-Gating and Antenna Compensation Techniques," in *The 2012 IEEE Antennas and Propagation Symposium*, Chicago, IL, Jul. 2012.