

PhD Oral Defense

Date: 10 August 2021 (Tuesday)

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Thesis Title

Wideband Substrate Integrated Magneto-Electric Dipole Antenna Arrays



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Abstract

This thesis presents a series of wideband substrate integrated antennas and arrays. All the proposed antennas are based on the concept of magneto-electric (ME) dipole and are extended to arrays for practical applications, including low side lobe level (SLL), compactness for beam scanning, low-profile reconfigurable transmitarray and the dual-polarizations. The proposed antennas are developed based on the concept of ME dipole, which enables to maintain good performance over a wide operating frequency band. Moreover, the proposed antenna arrays are integrated into the substrates, demonstrating their ease of integration with other systems, and fabrication-friendly nature.