# Abstracts

## Compact dual-mode filters for HTS satellite communication systems

*Z.M. Hejazi, P.S. Excell and Z. Jiang. "Compact dual-mode filters for HTS satellite communication systems." 1998 Microwave and Guided Wave Letters 8.8 (Aug. 1998 [MGWL]): 275-277.*

Novel compact dual-mode narrow bandpass microstrip filters using degenerate modes in multizigzag arms of square loop resonators were analyzed as realized in superconducting 2- and 4-pole versions and found to have high performance, selectivity, and substantial size reduction, compared with current designs. A 2-pole copper filter, scaled nearly eight times larger to operate at a center frequency of 142 MHz and bandwidth of 1.4%, was fabricated, tested, and compared with the prediction of a CAD tool to validate predictions for other analyzed designs. The agreement was found to be good.

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