

LIST OF TABLES

Table 2.1:	Performance comparison of the proposed filter with those reported in the literature.	42
Table 3.1:	Optimized geometrical parameter values of the proposed antenna (all dimensions are in millimeter).	50
Table 3.2:	Comparison of various types of monopole antennas in terms of bandwidth and physical area.	52
Table 3.3:	Comparison of the proposed monopole antenna with the antennas reported in the literature.	56
Table 3.4:	Geometrical parameter values of the BPF (all dimensions are in millimeter).	57
Table 3.5:	Optimized geometrical parameter values of the proposed integrated design of filtering antenna (all dimensions are in millimeter).	60
Table 3.6:	Performance comparison of the proposed filtering antenna and filtering antennas reported in the literature.	67
Table 4.1:	The optimised parameters of modified MMR-based UWB BPF (all dimensions are in millimeter).	77
Table 4.2:	Simulation and measured results of the modified MMR-based UWB BPF.	80
Table 4.3:	Comparison of different unit cell of DGSs with the proposed unit cell of DGS.	89
Table 4.4:	Optimized dimensions of UDGSs and R , L and C values with resonant frequencies of their equivalent parallel resonant circuits.	93
Table 4.5:	Optimised parameters of DGS-based LPF (all dimensions are in millimeter).	96
Table 4.6:	R , L , and C values of the equivalent circuit model along with resonant frequency of i^{th} UDGS (where $i = 1 - 12$) for the proposed DGS-based LPF.	100
Table 4.7:	Optimised coupling capacitor values for the equivalent circuit model of the proposed DGS-based LPF.	100
Table 4.8:	Comparison of the proposed filter with the LPFs reported in literature.	102
Table 4.9:	Simulation results of the BPF before and after integration of	105

	LPF.	
Table 4.10:	Optimised geometrical parameter values of the proposed filter (all dimensions are in millimeter).	106
Table 4.11:	Performance comparison of the proposed UWB BPF with those reported in the literature.	110
Table 5.1:	Optimized geometrical parameter values of the proposed modified elliptic-shaped UWB antenna (all dimensions are in millimeter).	121
Table 5.2:	Comparison of various types of monopole antennas in terms of bandwidth and physical area.	121
Table 5.3:	Comparison of the proposed UWB antenna with the UWB antennas reported in the literature.	128
Table 5.4:	Optimized geometrical parameter values of the super-compact BPF (all dimensions are in millimeter).	131
Table 5.5:	Optimized geometrical parameter values of the proposed UWB Filtering antenna.	134
Table 5.6:	Performance comparison of the proposed UWB filtering antenna with UWB filtering antennas reported in the literature.	144