Table 4a. Experimental results for the Gabor filtering (GF) technique with respect to image size (**σ=1.5**).

Database	Method	Accuracy [%]
TC 00000 (128×128)	GF $f_0 = 1.0/2\pi$, 4 angles	88.75
	GF $f_0 = 1.5/2\pi$, 4 angles	97.91
	GF $f_0 = 2.0/2\pi$, 4 angles	97.08
	GF $f_0 = 2.5/2\pi$, 4 angles	97.08
	GF $f_0 = 1.0/2\pi$, 6 angles	89.58
	GF $f_0 = 1.5/2\pi$, 6 angles	98.33
	GF $f_0 = 2.0/2\pi$, 6 angles	97.08
	GF $f_0 = 2.5/2\pi$, 6 angles	98.75
TC 00001 (64×64)	GF $f_0 = 1.0/2\pi$, 4 angles	89.58
	GF $f_0 = 1.5/2\pi$, 4 angles	96.87
	GF $f_0 = 2.0/2\pi$, 4 angles	98.57
	GF $f_0 = 2.5/2\pi$, 4 angles	96.21
	GF $f_0 = 1.0/2\pi$, 6 angles	88.82
	GF $f_0 = 1.5/2\pi$, 6 angles	96.87
	GF $f_0 = 2.0/2\pi$, 6 angles	98.76
	GF $f_0 = 2.5/2\pi$, 6 angles	97.34
TC 00002 (32×32)	GF $f_0 = 1.0/2\pi$, 4 angles	67.57
	GF $f_0 = 1.5/2\pi$, 4 angles	80.52
	GF $f_0 = 2.0/2\pi$, 4 angles	88.02
	GF $f_0 = 2.5/2\pi$, 4 angles	85.23
	GF $f_0 = 1.0/2\pi$, 6 angles	68.43
	GF $f_0 = 1.5/2\pi$, 6 angles	82.99
	GF $f_0 = 2.0/2\pi$, 6 angles	89.90
	GF $f_0 = 2.5/2\pi$, 6 angles	89.83
BD 00000 (256×256)	GF $f_0 = 1.0/2\pi$, 6 angles	90.27
	GF $f_0 = 1.5/2\pi$, 6 angles	94.44
	GF $f_0 = 2.0/2\pi$, 6 angles	100
	GF $f_0 = 2.5/2\pi$, 6 angles	100
BD 00001 (128×128)	GF $f_0 = 1.0/2\pi$, 6 angles	94.09
	GF $f_0 = 1.5/2\pi$, 6 angles	98.61
	GF $f_0 = 2.0/2\pi$, 6 angles	99.65
	GF $f_0 = 2.5/2\pi$, 6 angles	100
BD 00002 (64×64)	GF $f_0 = 1.0/2\pi$, 6 angles	88.63
	GF $f_0 = 1.5/2\pi$, 6 angles	95.31
	GF $f_0 = 2.0/2\pi$, 6 angles	96.53
	GF $f_0 = 2.5/2\pi$, 6 angles	95.49

Table 5a. Experimental results for the Gabor filtering technique with respect to texture rotation (**σ=1.5**).

Database	Method	Accuracy [%]
TC 00010 (128×128)	GF $f_0 = 1.0/2\pi$, 4 angles	75.31
	GF $f_0 = 1.5/2\pi$, 4 angles	65.52
	GF $f_0 = 2.0/2\pi$, 4 angles	60.00
	GF $f_0 = 2.5/2\pi$, 4 angles	56.32
	GF $f_0 = 1.0/2\pi$, 6 angles	75.52
	GF $f_0 = 1.5/2\pi$, 6 angles	65.31
	GF $f_0 = 2.0/2\pi$, 6 angles	61.06
	GF $f_0 = 2.5/2\pi$, 6 angles	54.76

Table 4b. Experimental results for the Gabor filtering (GF) technique with respect to image size (**σ=2.0**).

Database	Method	Accuracy [%]
TC 00000 (128×128)	GF $f_0 = 1.0/2\pi$, 4 angles	93.75
	GF $f_0 = 1.5/2\pi$, 4 angles	98.33
	GF $f_0 = 2.0/2\pi$, 4 angles	97.50
	GF $f_0 = 2.5/2\pi$, 4 angles	96.66
	GF $f_0 = 1.0/2\pi$, 6 angles	93.33
	GF $f_0 = 1.5/2\pi$, 6 angles	98.33
	GF $f_0 = 2.0/2\pi$, 6 angles	97.50
	GF $f_0 = 2.5/2\pi$, 6 angles	97.08
TC 00001 (64×64)	GF $f_0 = 1.0/2\pi$, 4 angles	90.81
	GF $f_0 = 1.5/2\pi$, 4 angles	98.20
	GF $f_0 = 2.0/2\pi$, 4 angles	98.10
	GF $f_0 = 2.5/2\pi$, 4 angles	94.31
	GF $f_0 = 1.0/2\pi$, 6 angles	90.62
	GF $f_0 = 1.5/2\pi$, 6 angles	98.67
	GF $f_0 = 2.0/2\pi$, 6 angles	98.39
	GF $f_0 = 2.5/2\pi$, 6 angles	96.87
TC 00002 (32×32)	GF $f_0 = 1.0/2\pi$, 4 angles	72.14
	GF $f_0 = 1.5/2\pi$, 4 angles	87.83
	GF $f_0 = 2.0/2\pi$, 4 angles	86.88
	GF $f_0 = 2.5/2\pi$, 4 angles	82.74
	GF $f_0 = 1.0/2\pi$, 6 angles	70.65
	GF $f_0 = 1.5/2\pi$, 6 angles	89.49
	GF $f_0 = 2.0/2\pi$, 6 angles	90.57
	GF $f_0 = 2.5/2\pi$, 6 angles	87.16
BD 00000 (256×256)	GF $f_0 = 1.0/2\pi$, 6 angles	91.66
	GF $f_0 = 1.5/2\pi$, 6 angles	98.61
	GF $f_0 = 2.0/2\pi$, 6 angles	100
	GF $f_0 = 2.5/2\pi$, 6 angles	100
BD 00001 (128×128)	GF $f_0 = 1.0/2\pi$, 6 angles	95.13
	GF $f_0 = 1.5/2\pi$, 6 angles	99.30
	GF $f_0 = 2.0/2\pi$, 6 angles	100
	GF $f_0 = 2.5/2\pi$, 6 angles	100
BD 00002 (64×64)	GF $f_0 = 1.0/2\pi$, 6 angles	91.76
	GF $f_0 = 1.5/2\pi$, 6 angles	96.44
	GF $f_0 = 2.0/2\pi$, 6 angles	96.27
	GF $f_0 = 2.5/2\pi$, 6 angles	94.96

Table 5b. Experimental results for the Gabor filtering technique with respect to texture rotation (**σ=2.0**).

Database	Method	Accuracy [%]
TC 00010 (128×128)	GF $f_0 = 1.0/2\pi$, 4 angles	71.64
	GF $f_0 = 1.5/2\pi$, 4 angles	61.51
	GF $f_0 = 2.0/2\pi$, 4 angles	57.47
	GF $f_0 = 2.5/2\pi$, 4 angles	51.35
	GF $f_0 = 1.0/2\pi$, 6 angles	71.48
	GF $f_0 = 1.5/2\pi$, 6 angles	61.25
	GF $f_0 = 2.0/2\pi$, 6 angles	56.74
	GF $f_0 = 2.5/2\pi$, 6 angles	50.44

Table 4c. Experimental results for the Gabor filtering (GF) technique with respect to image size (**σ=2.5**).

Database	Method	Accuracy [%]
TC 00000 (128×128)	GF $f_0 = 1.0/2\pi$, 4 angles	95.41
	GF $f_0 = 1.5/2\pi$, 4 angles	98.75
	GF $f_0 = 2.0/2\pi$, 4 angles	96.66
	GF $f_0 = 2.5/2\pi$, 4 angles	95.83
	GF $f_0 = 1.0/2\pi$, 6 angles	95.00
	GF $f_0 = 1.5/2\pi$, 6 angles	98.75
	GF $f_0 = 2.0/2\pi$, 6 angles	97.50
	GF $f_0 = 2.5/2\pi$, 6 angles	98.75
TC 00001 (64×64)	GF $f_0 = 1.0/2\pi$, 4 angles	92.70
	GF $f_0 = 1.5/2\pi$, 4 angles	98.76
	GF $f_0 = 2.0/2\pi$, 4 angles	97.06
	GF $f_0 = 2.5/2\pi$, 4 angles	93.75
	GF $f_0 = 1.0/2\pi$, 6 angles	91.00
	GF $f_0 = 1.5/2\pi$, 6 angles	99.33
	GF $f_0 = 2.0/2\pi$, 6 angles	98.20
	GF $f_0 = 2.5/2\pi$, 6 angles	96.96
TC 00002 (32×32)	GF $f_0 = 1.0/2\pi$, 4 angles	73.36
	GF $f_0 = 1.5/2\pi$, 4 angles	90.05
	GF $f_0 = 2.0/2\pi$, 4 angles	85.12
	GF $f_0 = 2.5/2\pi$, 4 angles	79.80
	GF $f_0 = 1.0/2\pi$, 6 angles	73.12
	GF $f_0 = 1.5/2\pi$, 6 angles	91.30
	GF $f_0 = 2.0/2\pi$, 6 angles	88.94
	GF $f_0 = 2.5/2\pi$, 6 angles	84.08
BD 00000 (256×256)	GF $f_0 = 1.0/2\pi$, 6 angles	95.83
	GF $f_0 = 1.5/2\pi$, 6 angles	100
	GF $f_0 = 2.0/2\pi$, 6 angles	100
	GF $f_0 = 2.5/2\pi$, 6 angles	100
BD 00001 (128×128)	GF $f_0 = 1.0/2\pi$, 6 angles	96.18
	GF $f_0 = 1.5/2\pi$, 6 angles	99.65
	GF $f_0 = 2.0/2\pi$, 6 angles	100
	GF $f_0 = 2.5/2\pi$, 6 angles	100
BD 00002 (64×64)	GF $f_0 = 1.0/2\pi$, 6 angles	93.49
	GF $f_0 = 1.5/2\pi$, 6 angles	96.87
	GF $f_0 = 2.0/2\pi$, 6 angles	95.66
	GF $f_0 = 2.5/2\pi$, 6 angles	94.62

Table 5c. Experimental results for the Gabor filtering technique with respect to texture rotation (**σ=2.5**).

Database	Method	Accuracy [%]
TC 00010 (128×128)	GF $f_0 = 1.0/2\pi$, 4 angles	67.13
	GF $f_0 = 1.5/2\pi$, 4 angles	57.52
	GF $f_0 = 2.0/2\pi$, 4 angles	53.09
	GF $f_0 = 2.5/2\pi$, 4 angles	55.33
	GF $f_0 = 1.0/2\pi$, 6 angles	67.05
	GF $f_0 = 1.5/2\pi$, 6 angles	57.47
	GF $f_0 = 2.0/2\pi$, 6 angles	51.14
	GF $f_0 = 2.5/2\pi$, 6 angles	52.34