

CONTENTS

ABOUT THE AUTHOR	4
1 INTRODUCTION.....	5
2 MICROSTRIP PATCH ANTENNAS FED BY SIW	7
2.1 Linearly Polarized Aperture-Coupled Microstrip Patch Antenna.....	7
2.2 Linearly Polarized Single Probe-Fed Microstrip Patch Antenna.....	9
2.3 Circularly Polarized Dual Probe-Fed Microstrip Patch Antenna.....	10
2.4 Aperture-Coupled Microstrip Patch Antenna Arrays	12
2.5 Conclusions.....	14
3 SIW SLOT ANTENNAS	15
3.1 Linearly Polarized SIW Rectangular Ring-Slot Antenna	15
3.2 Circularly Polarized SIW Square Ring-Slot Antenna.....	17
3.3 Beam- and Polarisation-Reconfigurable SIW Ring-Slot Antenna Array	18
3.4 SIW Monopolar Circular Ring-Slot Antenna for On-Body Communication	20
3.5 Conclusions.....	23
4 SIW END-FIRE ANTENNAS	24
4.1 Pixelated SIW Horn Antennas with Nearly Equal Beamwidths.....	24
4.1.1 Linearly Polarized Pixelated SIW Horn Antenna	24
4.1.2 Circularly Polarized Pixelated SIW Horn Antenna.....	26
4.2 High-Gain Wideband SIW Offset Parabolic Antenna	27
4.3 Conclusions	28
5 CONCLUSIONS.....	29
ACKNOWLEDGEMENTS	30
REFERENCES.....	31
ABSTRACT.....	35
ABSTRAKT.....	35