## **List of Acronyms**

**2D** Two-Dimensional

**3D** Three-Dimensional

ACS Asymmetrical Coplanar Strip

CPS Coplanar Stripline
CPW Coplanar Waveguide

**CSRR** Complementary Split Ring Resonator

**CST MWS** Computer Simulation Technology Microwave Studio

**DGS** Defected Ground Structure

**DLTTLPA** Dielectric Loaded Trapezoidal Toothed Log-periodic

Antenna

DRA Dielectric Resonator Antenna
EBG Electromagnetic Band Gap

**ECC** Envelope Correlation Coefficient

**EM** Electromagnetic

**EMC** Electromagnetic Compatibility

FCC Federal Communication Commission

**FEM** Finite Element Method

**FIA** Frequency Independent Antenna

**HF** High Frequency

**HFSS** High Frequency Structure Simulator

**HiperLAN** High Performance Radio LAN

**HSRS** Hexagonal Split Ring Slot

**IDCLLR** Interdigital Capacitance Loading Loop Resonators

ITU International Telecommunication Union

JJA Josephson Junction Array
LPA Log-Periodic Antenna

**LPDA** Log-Periodic Dipole Array

MEBG Metallo Electromagnetic Band Gap

MIMO Multiple-Input-Multiple-Output

MPA Microstrip Patch Antenna

MS Microstrip Line

MS-to-CPS Microstrip Line-to-Coplanar Stripline

PCB Printed Circuit Board

PMA Planar Monopole Antenna

**PSD** Power Spectral Density

**QSCA** Quasi-Self-Complementary Antenna

**RSRS** Rectangular Split Ring Slot

SAMC Spiral Artificial Magnetic Conductor

SCA Self-Complementary Antenna

**SFF** System Fidelity Factor

SIR Stepped Impedance Resonator

**SNR** Signal to Noise Ratio

TLPA Toothed Log-Periodic Antenna

TTLPA Trapezoidal Toothed Log-Periodic Antenna

TV Television

UHF Ultra High Frequency

UMTS Universal Mobile Telecommunication Service

UWB Ultrawideband

**VNA** Vector Network Analyzer

**VSWR** Voltage Standing Wave Ratio

**WiMAX** Worldwide Interoperability for Microwave Access

WLAN Wireless Local Area Network