CONTENTS

Chapter 1: Theoretical background of metamaterials and its applications

Chapter 2: Frequency and time-domain analyses of multiple reflection and interference phenomena in a metamaterial absorber

Chapter 3: Mathematical int interpretation of wave propagation, standing wave resonance and absorption in a metasurface absorber

Chapter 4: Structural and mathematical analyses of a dual-sided metasurface for the design of multifucntional and bidirectional optoelectronics devices

Chapter 5: A metasurface based broadband cross polarization converter for far infrared region

Chapter 6: Conclusion and Future Scope