

Abstract: Microstrip antenna arrays play important role in RADAR applications because of their light weight, tiny structure, easy and mass production. While designing the RADAR antennas side lobe level is the significant parameter in majority of applications to avoid false targets. In the present work microstrip antenna array considered for low SLL without effecting it's gain and bandwidth by providing effective amplitudes, phase and position in terms of standard evolutionary algorithm. Evolutionary algorithms are used to provide an effective amplitude to individual antenna elements. For a microstrip antenna array DE algorithm was applied and side lobe level obtained up to -20.12dB.