عنوان مقاله:

Optimization of Array Factor in Linear Arrays Using Modified Genetic Algorithm

محل انتشار:

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خلاصه مقاله:

The array factor (sidelobe level, SLL) of a linear array is optimized using modified continuous genetic algorithms in this work. The amplitudes and phases of the currents as well as the separation of the antennas are all taken as variables to be controlled. The results of the design using modified GA versions are compared with other methods. Two design problems were studied using several continuous modified GA versions and the results are presented as several plots. As a final example, the design specifications for an array with ۲۰۰ elements are given. The effectiveness and advantages of the proposed modified GA versions are outlined.

کلمات کلیدی:

Linear Arrays, Array Factor (AF), Sidelobe Level (SLL) Genetic Algorithm (GA), optimization