

The purpose of the present work is to employ the Taguchi's optimization technique, which is a relatively new optimization technique, for null steering in the antenna radiation pattern by controlling only the element positions of a nonuniform linear array for a specified beamwidth and minimum achievable sidelobe level. As a practical part, an array of parallel dipoles is designed to account for the mutual coupling effects on the performance of the array in terms of directivity, sidelobe level and null placement. Illustrative examples are considered to impose single or multiple nulls in the antenna pattern at specific interference directions with the maximum side lobe level reduction of array antenna design