

Design and resonant frequency calculation of rectangular microstrip antennas

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Abstract :

This study introduces an original theoretical approach for rectangular microstrip antennas analysis and design. The purpose method consists in the coupling between artificial neural networks tool applied to the analysis of rectangular antennas and a tabu search for the optimization. A neural network acting as database will allow to reduce strongly the computation time. This method will be illustrated in four examples.

Keywords : rectangular microstrip antenna; analysis; resonant frequency; neural networks; synthesis; tabu search.

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