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Abstract

The efficient way of improving the system capacity by filtering the interferers spatially is achieved through beam forming in smart antennas. Unlike Omni directional antennas, smart antennas radiate power only in the desired direction where the users are present at the moment. The spatial filtering of the signals from entire angular region is monitored and the desired radiation pattern is achieved towards the user and nulls in the interferers. The optimization of radiation pattern provides the above purpose. To optimize radiation pattern the direction of arrival is to be known. The beam scanning is performed to get the desired angle of reception for beam steering. In this paper, the firefly algorithm is analyzed for radiation pattern

synthesis in planar array.

Refer

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