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(57) Abstract :
 The present disclosure relates to a multiple-input-multiple-output (MIMO) antenna (100) system for 5G communication. The system includes a single-radiating element substrate (102) designed for 60.0GHz frequency, simulated and optimized for performance, a plurality of a four-port MIMO configuration derived from the single-port antenna (100), with performance characteristics obtained through simulation, and the configuration is printed on the substrate (102), a plurality of connector (104) attached to the substrate (102), having each connector (104) having a feedline connected to the connector (104), and a plurality of radiating patch (106)es, each patch (106) fed by the feedline printed on an upper plane of the substrate (102) and a ground printed on the opposite plane of the substrate (102).

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