

Higher system capacities can be achieved if multiple antennas are used on both sides of the wireless link, thus creating a multiple-input-multiple-output (MIMO) system. In this work, the maximization of MIMO system capacity in Rayleigh fading, spatially correlated channels involving practical antenna arrays is challenged through inter-element spacing optimization. The system capacity is evaluated using a proposed formula that takes into account both antenna mutual coupling and signal correlation. Capacity values turn out to outperform the ones obtained considering the conventional antenna array geometries