Performance Evaluation of 5G Millimeter-Wave Cellular network in dense urban development.

- **Author(s):** Oleksandr Tsopa ,Oleksandra Dudka ,Anatolii Merzlikin ,Mykyta Astrashkov
- **Abstract:** The article is devoted to the problem of using microwaves (MM WB) in next generation 5G wireless communication systems. The aim of this work is to clarify the methodology for calculating the performance of communication channels in the millimeter wavelength band of 60 GHz, taking into account the antenna directional patterns when deploying various segments of the 5G communication network in dense urban development.
- **Keywords:** millimeter wave propagation, 5G wireless communication, antenna radiation patterns, IEEE 802.11ad,