

Optical Technologies Supporting 5G/6G Mobile Networks

Guest Editors:

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Lavacca**Deadline for manuscript
submissions:**31 May 2024**

Message from the Guest Editors

Dear Colleagues,

We invite scientists to submit original papers presenting the results of research on new optical technologies, which may be of key importance in future 5G/6G mobile networks. The potential topics of this Special Issue include, but are not limited to:

- evolution of the optical Xhaul architecture;
- optical O-RAN supporting QoS services;
- smart all-optical paths for O-RAN and 5G/6G core network;
- optical resource management tools dedicated to the mobile and access networks;
- new protocols and techniques for optical slicing;
- elastic optical networking in radio and core domain;
- D-RoF and A-RoF techniques dedicated to effective O-RANs;
- optical networks based on multicore fibers in O-RAN domains;
- effective integration of mobile systems and passive optical networks;
- BBU/CU cloud based on all-optical elastic network;
- RRH/RU as an optical node for radio-fiber services;
- O-RAN DU as optical network cloud service;
- optical eCPRI/NGFI evolution and adaptation to 6G mobile networks controlled by AI;
- ML methods and algorithms for DU service localization and optimization in optical network.

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