

#### **Cooperative interference avoidance scheduler for radio resource management in NB-IoT systems**

**Mwakwata, Collins Burton; Alam, Muhammad Mahtab; Le Moullec, Yannick; Malik, Hassan; Päränd, Sven** EuCNC 2020: 2020 European Conference on Networks and Communications (EuCNC), Dubrovnik, Croatia, Croatia, 15-18 June 2020 : proceedings 2020 / p. 154-159 <https://doi.org/10.1109/EuCNC48522.2020.9200967>

#### **Coverage analysis of NB-IoT and sigfox : two Estonian University campuses as a case study**

**Poddar, Nishant; Mass, Jakob; Khan, Sikandar Muhammad Zulqarnain** 2020 16th International Wireless Communications & Mobile Computing Conference (IWCMC) : Limassol, Cyprus, June 15 - 19, 2020 2020 / p. 1491-1497 : ill <https://doi.org/10.1109/IWCMC48107.2020.9148570>

#### **Monitoring and control of smart urban drainage systems using NB-IoT cellular sensor networks**

**Roosipuu, Priit; Annus, Ivar; Kuusik, Alar; Kändler, Nils; Alam, Muhammad Mahtab** Water science & technology Water science and technology 2023 / p. 339-354 <https://doi.org/10.2166/wst.2023.222> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **NB-IoT based visual smart waste management system**

**Zulqarnain Khan, Sikandar; Hein, Haigo; Alam, Muhammad Mahtab; Le Moullec, Yannick; Päränd, Sven** 2022 18th Biennial Baltic Electronics Conference (BEC) 2022 / 6 p. : ill <https://doi.org/10.1109/BEC56180.2022.9935601>

#### **NB-IoT network field trial : indoor, outdoor and underground coverage campaign**

**Malik, Hassan; Khan, Sikandar Muhammad Zulqarnain; Sarmiento, Jeffrey Leonel Redondo; Kuusik, Alar; Alam, Muhammad Mahtab; Le Moullec, Yannick; Päränd, Sven** IWCMC 2019 : 15th International Wireless Communications & Mobile Computing Conference (IWCMC), June 24–28, 2019, Tangier, Morocco 2019 / p. 537-542 : ill <https://doi.org/10.1109/IWCMC.2019.8766568>

#### **Rate-latency optimization for NB-IoT with adaptive resource unit configuration in uplink transmission**

**Elgarhy, Osama Mohamed Mostafa; Reggiani, Luca; Malik, Hassan; Alam, Muhammad Mahtab; Imran, Muhammad Ali** IEEE Systems Journal 2021 / p. 265 - 276 <https://doi.org/10.1109/JSYST.2020.2991073> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)