|  |  |  |  |
| --- | --- | --- | --- |
| **Title:** | Design and Performance Evaluation of Eight Channel WDM Based PON with CSRZ-QPSK Transmitter Configuration | | |
| **Author(s) Name:** | Irin Sultana Bristy, Md. Tijul Islam, Mohammad Nasir Uddin | | |
| **Contact Email(s):** | drnasir@aiub.edu | | |
| **Published Journal Name:** | ACM ICCA 2020 - International Conference on Computing Advancements (ICCA-2020) | | |
| **Type of Publication:** | Conference | | |
| **Volume:** |  | Issue |  |
| **Publisher:** | IEEE | | |
| **Publication Date:** | Published – 20st March 2020 | | |
| **ISSN:** |  | | |
|  |  | | |
| **DOI:** | [10.1145/3377049.3377075](https://doi.org/10.1145/3377049.3377075) | | |
|  |  | | |
| **URL:** | <https://doi.org/10.1145/3377049.3377075> | | |
| **Other Related Info.:** | pp. 1-4. Paper no. 12 | | |
|  | | | |

|  |  |
| --- | --- |
| **Abstract:** |  |
| In this paper, One Mach-Zehnder Modulation and carrier suppressed return to zero differential quadrature phase-shift keying (CSRZ-QDPSK) transmitter based wavelength-division-multiplexed passive optical network (WDM-PON) is designed. Eight sources with various wavelengths are designed to approach an optical network unit (ONU) in order to transmit for 200 km. The performances are evaluated by analyzing eye diagrams, eye-opening scenarios and quality factors in the receiver end. This network shows a reliable transmission property for eight different channels over the optical wire-line network. | |