

Continuous Calibration of Microring Weights for Analog Optical Networks

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Abstract—Continuously configurable weighted addition is a key function for multivariate analog signal processing. The wavelength-division multiplexed version of weighted addition based on microrings can apply the strengths of photonic integration, wideband photonic information processing, and multi-wavelength networks toward new approaches to ultrafast analog distributed processing. In this letter, we experimentally demonstrate single-channel functionality using a 5-GHz signal, showing





