**Sub-nanosecond Optical Switching Using Photonic Integrated Soliton Microcomb**

The sub-nanoseconds (< 550 ps) optical switching is achieved by using a multiwavelength source based on a soliton microcomb (Si3N4) and wavelength selector based on a semiconductor optical amplifier. The optical switching systems with 25 GBd NRZ and PAM4 burst mode transmission are demonstrated.