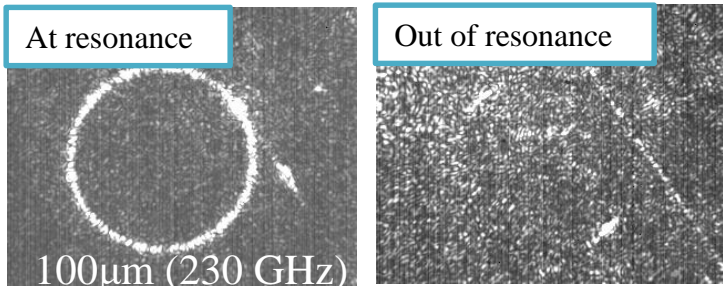
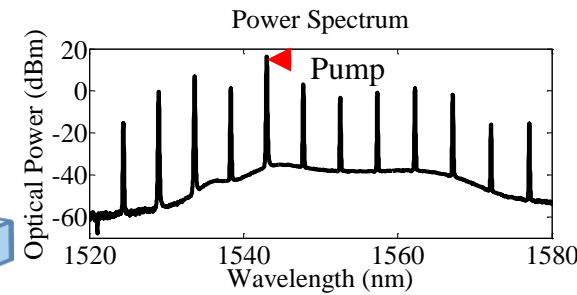
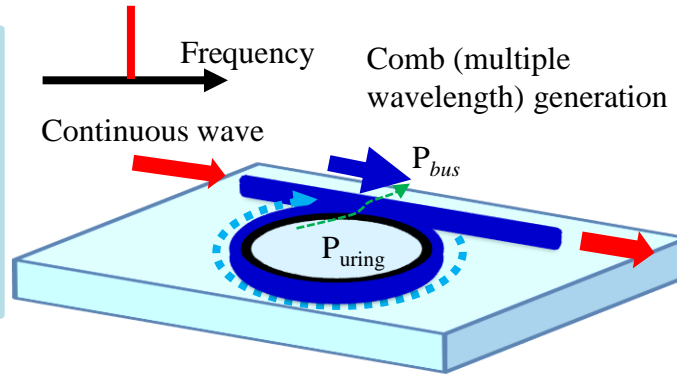
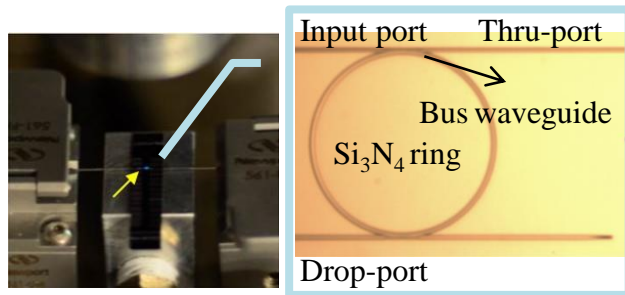


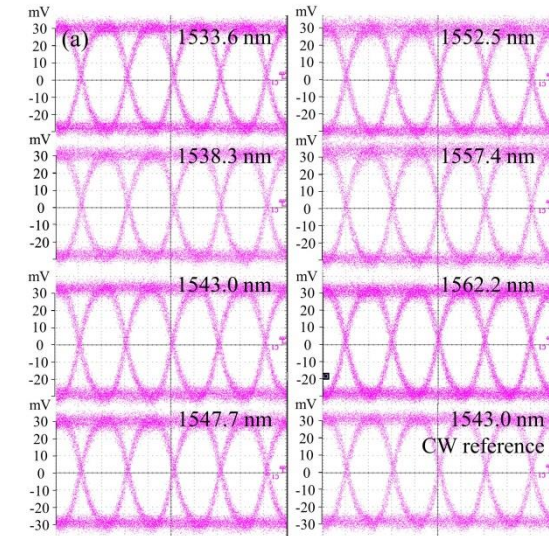
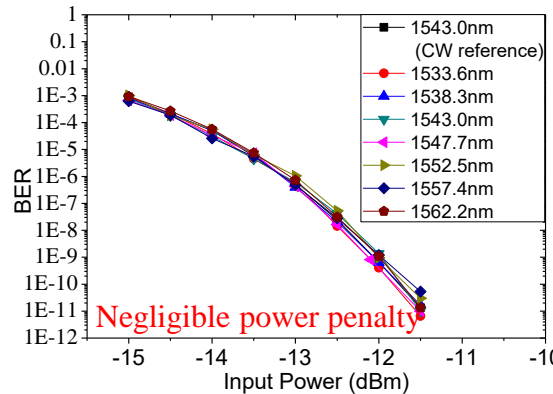


On-chip Multiple Wavelength Source / Optical Communication

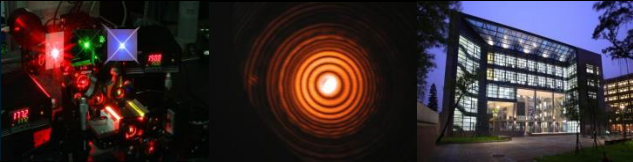
- 1. Low intensity noise & Error-free communications at 10 Gb/s with open eye
- 2. Frequency combs with high repetition rate (hundreds of GHz to several THz)



Good communication performance 10GHz On-off keying



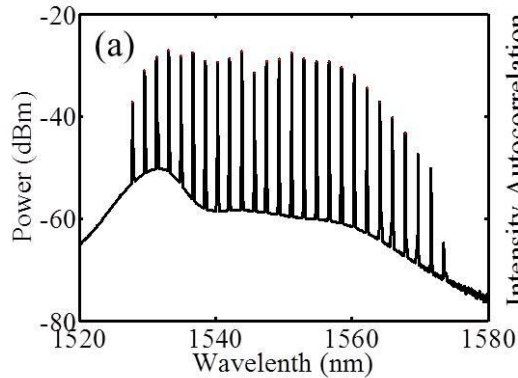
Opt. Express **20**, 29284 (2012).
Opt. Express **21**, 22441 (2013).



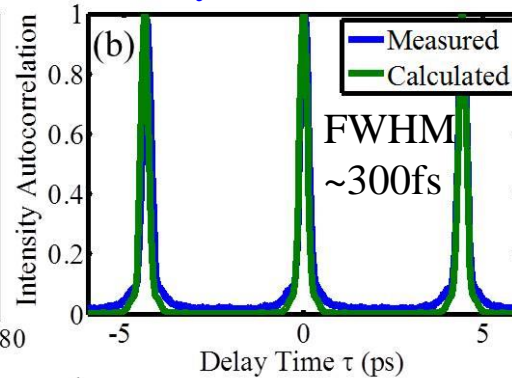
On-chip Pulse Generators / Arbitrary Waveform Generators

1. Coherent comb generation with large bandwidth and smooth comb spectrum.
2. A short pulse (sub-hundred femtosecond) directly from the microresonator.

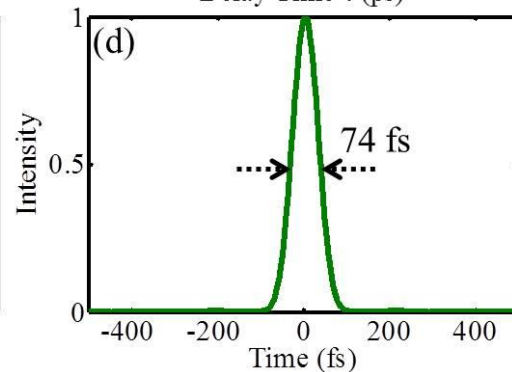
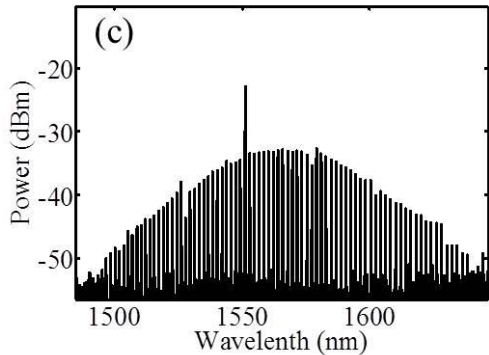
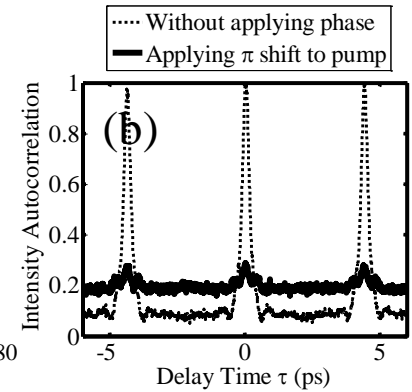
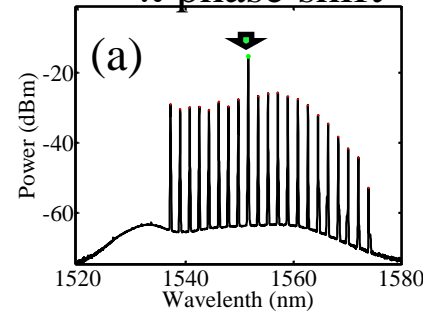
Optical spectrum



Intensity autocorrelation



π phase shift



Opt. Express **24**, 10890 (2016).

Optics EXPRESS
 Author Information | Submit Your Manuscript | Create E-alerts | Follow Us
 Browse 15 of the Most Cited Optics Express Articles
 OSA's Optics Express publishes some of the most highly cited research in optics and photonics. In fact, with 104,686 Total Citations in 2017, it is ranked the 2nd most cited Journal out of 94 journals in the Optics Category, according to the 2017 Journal Citation Reports® (Clarivate Analytics, 2018). It is also ranked #2 in the Google Scholar Optics & Photonics Category (h5-index 103).

Intracavity characterization of micro-comb generation in the single-soliton regime

Pei-Hsun Wang, Jose A. Jaramillo-Villegas, Yi Xuan, Xiaoxiao Xue, Chengying Bao, Daniel E. Leaird, Minghao Qi, and Andrew M. Weiner

Opt. Express **24**(10), 10890-10897 (2016) View: [HTML](#) | [PDF](#)