Weiqi Xue - DTU Orbit (16/01/2019)
Xue, Weiqi

Research outputs:

Demonstration of a self-pulsing photonic crystal Fano laser
Research output: Research - peer-review › Journal article – Annual report year: 2017

All-Optical Switching Improvement Using Photonic-Crystal Fano Structures
Research output: Research - peer-review › Journal article – Annual report year: 2016

Photonic crystal Fano structures and their application to ultrafast switching and lasers
Research output: Research - peer-review › Article in proceedings – Annual report year: 2017

Threshold Characteristics of Slow-Light Photonic Crystal Lasers
Research output: Research - peer-review › Journal article – Annual report year: 2016

Ultrahigh-speed Si-integrated on-chip laser with tailored dynamic characteristics
Park, G. C., Xue, W., Piels, M., Zibar, D., Mark, J., Semenova, E. & Chung, I-S. 2016 In : Scientific Reports. 6, 38801
Research output: Research - peer-review › Journal article – Annual report year: 2016

Experimental demonstration of non-reciprocal transmission in a nonlinear photonic-crystal Fano structure
Research output: Research - peer-review › Article in proceedings – Annual report year: 2015

Highly Sensitive Photonic Crystal Cavity Laser Noise Measurements using Bayesian Filtering
Research output: Research - peer-review › Article in proceedings – Annual report year: 2015

Hybrid III-V/SOI single-mode vertical-cavity laser with in-plane emission into a silicon waveguide
Research output: Research - peer-review › Article in proceedings – Annual report year: 2015

Hybrid vertical-cavity laser with lateral emission into a silicon waveguide
Research output: Research - peer-review › Journal article – Annual report year: 2015

III-V/SOI vertical cavity laser structure for 120 Gbit/s speed
Research output: Research - peer-review › Article in proceedings – Annual report year: 2015

III-V/SOI vertical cavity laser with in-plane output into a Si waveguide
Tunable true-time delay of a microwave photonic signal realized by cross gain modulation in a semiconductor waveguide


Slow and fast light effects in semiconductor optical amplifiers for applications in microwave photonics


360° tunable microwave phase shifter based on silicon-on-insulator dual-microring resonator

Pu, M., Xue, W., Liu, L., Ou, H., Yvind, K. & Hvam, J. M. 2010 proceedings ECIO. IEEE, p. WeD3

Experimental validation of efficient methods for the prediction of patterning effects in SOA-based optical switches


Microwave photonic phase shifter based on tunable silicon-on-insulator microring resonator


Microwave photonic true time delay based on cross gain modulation in semiconductor optical amplifiers


Recent advances in slow and fast light for applications in microwave photonics: [invited]


Slow and fast light effects and their applications to microwave photonics using semiconductor optical amplifiers

Sales, S., Xue, W., Mørk, J. & Gasulla, I. 2010 In : IEEE Transactions on Microwave Theory and Techniques. 58, 11, p. 3022-3038

Slow and fast light in semiconductor waveguides


Tunable microwave phase shifter based on silicon-on-insulator microring resonator


Widely tunable microwave phase shifter based on silicon-on-insulator dual-microring resonator

Pu, M., Liu, L., Xue, W., Ding, Y., Ou, H., Yvind, K. & Hvam, J. M. 2010 In : Optics Express. 18, 6, p. 6172-6182
Compact optically-fed microwave true-time delay using liquid crystal photonic bandgap fiber device
Research output: Research - peer-review › Article in proceedings – Annual report year: 2009

Controlling the speed of light in semiconductor waveguides: Physics and applications: [invited]
Research output: Research - peer-review › Article in proceedings – Annual report year: 2009

Demonstration of tunable microwave photonic notch filters using slow and fast light effects in semiconductor optical amplifiers
Xue, W., Sales, S., Mørk, J. & Capmany, J. 2009 Conference proceedings, OFC. IEEE
Research output: Research - peer-review › Article in proceedings – Annual report year: 2009

Experimental demonstration of 360 tunable RF phase shift using slow and fast light effects
Xue, W., Sales, S., Capmany, J. & Mørk, J. 2009 Proceedings of Slow and Fast Light, Topical meeting and Tabletop Exhibit. Optical Society of America, p. SMB6
Research output: Research - peer-review › Article in proceedings – Annual report year: 2009

Exploring carrier dynamics in semiconductors for slow light: [invited]
Research output: Research - peer-review › Article in proceedings – Annual report year: 2009

Microwave phase shifter with controllable power response based on slow-and fast-light effects in semiconductor optical amplifiers
Xue, W., Sales, S., Capmany, J. & Mørk, J. 2009 In : Optics Letters. 34, 7, p. 929-931
Research output: Research - peer-review › Journal article – Annual report year: 2009

Optically fed microwave true-time delay based on a compact liquid-crystal hotonic-bandgap-fiber device
Wei, L., Xue, W., Chen, Y., Alkeskjold, T. T. & Bjarklev, A. O. 2009 In : Optics Letters. 34, 18, p. 2757-2759
Research output: Research - peer-review › Journal article – Annual report year: 2009

Optical signal processing using slow and fast light technologies: [invited]
Research output: Research - peer-review › Article in proceedings – Annual report year: 2009

Photonic generation of ultrawideband monocycle and doublet pulses by using a semiconductor-optical-amplifier-based wavelength converter
Research output: Research - peer-review › Journal article – Annual report year: 2009

Photonic generation of UWB monocycle using a cascaded semiconductor optical amplifier and electroabsorption modulator
Research output: Research - peer-review › Article in proceedings – Annual report year: 2009
Slow and fast light effects in semiconductor waveguides for applications in microwave photonics
Research output: Research - peer-review › Article in proceedings – Annual report year: 2009

Slow and fast light in semiconductor structures: physics and applications: [invited]
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2009

The optical chip: high speed and diminutive size
Research output: Communication › Book chapter – Annual report year: 2009

The role of input chirp on phase shifters based on slow and fast light effects in semiconductor optical amplifiers
Xue, W., Chen, Y., Öhman, F. & Mørk, J. 2009 In : Optics Express. 17, 3, p. 1404-1413
Research output: Research - peer-review › Journal article – Annual report year: 2009

Widely tunable microwave photonic notch filter based on slow and fast light effects
Xue, W., Sales, S., Mark, J. & Capmany, J. 2009 In : IEEE Photonics Technology Letters. 21, 3, p. 167-169
Research output: Research - peer-review › Journal article – Annual report year: 2009

Analysis of an effective optical filtering technique to enhance microwave phase shifts based on slow and fast light effects
Research output: Research - peer-review › Article in proceedings – Annual report year: 2008

Broadband microwave photonic phase shifter based on polarisation rotation
Research output: Research - peer-review › Journal article – Annual report year: 2008

Carrier dynamics and slow light in semiconductor nanostructures
Research output: Research - peer-review › Article in proceedings – Annual report year: 2008

Chirp Dependence of Filter Assisted Slow and Fast Light Effects in Semiconductor Optical Amplifiers
Research output: Research - peer-review › Article in proceedings – Annual report year: 2008

Enhancing light slow-down in semiconductor optical amplifiers by optical filtering
Research output: Research - peer-review › Journal article – Annual report year: 2008

Experimental demonstration of strongly enhanced light slow-down in semiconductor optical amplifiers by optical filtering
Research output: Research - peer-review › Article in proceedings – Annual report year: 2008

Microwave phase shifter based on mach-zehnder intensity modulator and polarization rotation in an SOA
Xue, W., Ohman, F., Blaaberg, S., Chen, Y., Sales, S. & Mørk, J. 2008 CLEO/QELS08. San Jose, CA, USA: Optical Society of America, p. CMP2
Research output: Research - peer-review › Article in proceedings – Annual report year: 2008
Semi-analytical model of filtering effects in microwave phase shifters based on semiconductor optical amplifiers
Research output: Research - peer-review › Article in proceedings – Annual report year: 2008

Slow and fast light effects in semiconductor waveguides for applications in microwave photonics
Research output: Research - peer-review › Article in proceedings – Annual report year: 2008

Theory of Optical-Filtering Enhanced Slow and Fast Light Effects in Semiconductor Optical Waveguides
Research output: Research - peer-review › Journal article – Annual report year: 2008

Projects:

Slow and Fast Light for Applications in Microwave Photonics
Xue, W., Mørk, J., Sales, S., Öhman, F., Oxenløwe, L. K., Morthier, G. J. I. & Nielsen, M. L.
Forskningsrådsfinansiering
01/07/2007 → 29/09/2010
Project: PhD

PhCLaser: Dynamics and noise of Photonic-crystal based nano and micro lasers
Xue, W.
01/01/2013 → …
Project: Research

GOSPEL: Governing the speed of light
Mørk, J., Gregersen, N., Yvind, K., Kristensen, P. T., Hansen, P. L., Semenova, E., Xue, W., Pu, M. & Larsson, D.
Forsk. EU - Rammeprogram
01/09/2008 → 31/12/2011
Project: Research

Activities:

International Nano-Optoelectronics Workshop (iNOW)
Xue, W. (Participant)
10 Aug 2009 → 14 Aug 2009
Activity: Attending an event › Participating in or organising workshops, courses, seminars etc.