

## Alexander Lebedev - DTU Orbit (07/08/2016)

**Lebedev, Alexander**  
alele@fotonik.dtu.dk

Department of Photonics Engineering - PhD Student, Former

### Publications:

#### **Low complexity source and channel coding for mm-wave hybrid fiber-wireless links**

Lebedev, A., Vegas Olmos, J. J., Pang, X., Tafur Monroy, I., Larsen, K. J. & Forchhammer, S. 2014 In : *Optics Communications*. 318, p. 142-146

Publication: Research - peer-review › Journal article – Annual report year: 2014

#### **Multigigabit W-Band (75–110 GHz) Bidirectional Hybrid Fiber-Wireless Systems in Access Networks**

Pang, X., Lebedev, A., Vegas Olmos, J. J. & Tafur Monroy, I. 2014 In : *Journal of Lightwave Technology*. 32, 23, p. 4585 - 4592

Publication: Research - peer-review › Journal article – Annual report year: 2014

#### **Simultaneous 60-GHz RoF Transmission of Lightwaves Emitted by ECL, DFB, and VCSEL**

Lebedev, A., Pang, X., Vegas Olmos, J. J., Forchhammer, S. & Tafur Monroy, I. 2014 In : *IEEE Photonics Technology Letters*. 26, 7, p. 733-736

Publication: Research - peer-review › Journal article – Annual report year: 2014

#### **Wireless and wireline service convergence in next generation optical access networks - the FP7 WISCON project**

Vegas Olmos, J. J., Pang, X., Lebedev, A., Sales Llopis, M. & Tafur Monroy, I. 2014 In : *IEEE Transactions on Communications*. E97-B, p. 1537-1546

Publication: Research - peer-review › Journal article – Annual report year: 2014

#### **Architectures for radio over fiber transmission of high-quality video and data signals**

Lebedev, A., Forchhammer, S., Tafur Monroy, I. & Vegas Olmos, J. J. 31 Aug 2013 Kgs. Lyngby: Technical University of Denmark. 155 p.

Publication: Research › Ph.D. thesis – Annual report year: 2013

#### **A 15-meter Multi-Gigabit W-band Bidirectional Wireless Bridge in Fiber-Optic Access Networks**

Pang, X., Vegas Olmos, J. J., Lebedev, A. & Tafur Monroy, I. 2013 *Proceedings of 2013 IEEE International Topical Meeting on Microwave Photonics*. IEEE, 4 p.

Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

#### **A multi-gigabit W-Band bidirectional seamless fiber-wireless transmission system with simple structured access point**

Pang, X., Vegas Olmos, J. J., Lebedev, A. & Tafur Monroy, I. 2013 *39th European Conference and Exhibition on Optical Communication (ECOC 2013)*. IEEE, 3 p.

Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

#### **A novel method for combating dispersion induced power fading in dispersion compensating fiber**

Lebedev, A., Vegas Olmos, J. J., Iglesias Olmedo, M., Forchhammer, S. & Tafur Monroy, I. 2013 In : *Optics Express*. 21, 11, p. 13617-13625

Publication: Research - peer-review › Journal article – Annual report year: 2013

#### **Demonstration and Comparison Study for V- and W-Band Real-Time High-Definition Video Delivery in Diverse Fiber-Wireless Infrastructure**

Lebedev, A., Vegas Olmos, J. J., Pang, X., Forchhammer, S. & Tafur Monroy, I. 2013 In : *Fiber and Integrated Optics*. 32, 2, p. 93-104

Publication: Research - peer-review › Journal article – Annual report year: 2013

#### **Feasibility Study and Experimental Verification of Simplified Fiber-Supported 60-GHz Picocell Mobile Backhaul Links**

Lebedev, A., Pang, X., Vegas Olmos, J. J., Beltrán, M., Llorente, R., Forchhammer, S. & Tafur Monroy, I. 2013 In : *IEEE Photonics Journal*. 5, 4, 13 p., 7200913

Publication: Research - peer-review › Journal article – Annual report year: 2014

**Fiber-supported 60 GHz mobile backhaul links for access/metropolitan deployment**

Lebedev, A., Pang, X., Vegas Olmos, J. J., Forchhammer, S., Tafur Monroy, I., Beltrán, M. & Llorente, R. 2013 *ONDM 2013 Brest, France*. p. 189-192

Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

**Gigabit close-proximity wireless connections supported by 60 GHz RoF links with low carrier suppression**

Lebedev, A., Pang, X., Vegas Olmos, J. J., Forchhammer, S. & Tafur Monroy, I. 2013 In : *Optics Express*. 21, 21, p. 24574-24581

Publication: Research - peer-review › Journal article – Annual report year: 2013

**Multi-Gigabit Capacity W-band Hybrid Wireless-Photonic Transmission Link**

Vegas Olmos, J. J., Pang, X., Lebedev, A. & Tafur Monroy, I. 2013 *Proceedings of Asia Communications and Photonics Conference*,. Optical Society of America, 3 p. ATH3G.1

Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

**Performance Evaluation for DFB and VCSEL-based 60 GHz Radio-over-Fiber System**

Pang, X., Lebedev, A., Vegas Olmos, J. J., Tafur Monroy, I., Beltrán, M. & Llorente, R. 2013 *ONDM 2013 Brest, France*. p. 251-255

Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

**Seamless Optical Fiber-Wireless Millimeter- Wave Transmission Link for Access Networks**

Pang, X., Lebedev, A., Vegas Olmos, J. J. & Tafur Monroy, I. 2013 *2013 18th OptoElectronics and Communications Conference held jointly with 2013 International Conference on Photonics in Switching (OECC/PS)*. IEEE, p. TuPP-12 2 p.

Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

**Tunable Photonic RF Generator for Dynamic Allocation and Multicast of 1.25 Gbps Channels in the 60 GHz Unlicensed Band**

Lebedev, A., Pang, X., Vegas Olmos, J. J., Tafur Monroy, I. & Forchhammer, S. 2013 *2013 IEEE MTT-S International Microwave Symposium Digest (IMS)*. IEEE, 3 p. (I E E E - M T T S International Microwave Symposium. Digest).

Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

**VCSEL sources for optical fiber-wireless composite data links at 60GHz**

Vegas Olmos, J. J., Pang, X., Lebedev, A. & Tafur Monroy, I. 2013 *2013 18th OptoElectronics and Communications Conference held jointly with 2013 International Conference on Photonics in Switching (OECC/PS)*. IEEE, 2 p.

Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

**Combined single-mode/multimode fiber link supporting simplified in-building 60-GHz gigabit wireless access**

Pham, T. T., Lebedev, A., Beltrán, M., Yu, X., Llorente, R. & Tafur Monroy, I. 2012 In : *Optical Fiber Technology*. 18, 4, p. 226-229

Publication: Research - peer-review › Journal article – Annual report year: 2012

**Enabling uncompressed video transmission in double-sideband 60 GHz radio-over-fiber links**

Lebedev, A., Vegas Olmos, J. J., Iglesias Olmedo, M., Forchhammer, S. & Tafur Monroy, I. 2012 *2012 IEEE Photonics Conference (IPC)*. IEEE, p. 578-579

Publication: Research - peer-review › Article in proceedings – Annual report year: 2012

**Simplified Fiber-Wireless Distribution of HD Video in Passive and Active W-band Close Proximity Terminals**

Lebedev, A., Rodes Lopez, R., Yu, X., Vegas Olmos, J. J., Tafur Monroy, I. & Forchhammer, S. 2012 *3rd Fiber Optics in Access Network - FOAN2012*. IEEE, p. 523-527

Publication: Research - peer-review › Article in proceedings – Annual report year: 2012

**Optimization of high-definition video coding and hybrid fiber-wireless transmission in the 60 GHz band**

Lebedev, A., Pham, T. T., Beltrán, M., Yu, X., Ukhanova, A., Deng, L., Guerrero Gonzalez, N., Llorente, R., Tafur Monroy, I. & Forchhammer, S. 2011 *Proceedings of the European Conference on Optical Communication (ECOC) 2011*. Optical Society of America, p. We.10.P1.97

Publication: Research - peer-review › Article in proceedings – Annual report year: 2011

**Optimization of high-definition video coding and hybrid fiber-wireless transmission in the 60 GHz band**

Lebedev, A., Pham, T. T., Beltrán, M., Yu, X., Ukhanova, A., Llorente, R., Tafur Monroy, I. & Forchhammer, S. 2011 In : *Optics Express*. 19, 26, p. B895-B904

Publication: Research - peer-review › Journal article – Annual report year: 2011

**SMF/MMF Based In-building Gigabit Wireless Access Systems Using Simplified 60-GHz Transceivers**

Pham, T. T., Lebedev, A., Beltrán, M., Yu, X., Llorente, R. & Tafur Monroy, I. 2011 *Proceedings of the European Conference on Optical Communication (ECOC) 2011*. Optical Society of America, p. We.10.P1.111

Publication: Research - peer-review › Article in proceedings – Annual report year: 2011

**Projects:**

**High quality video over broadband optical-wireless network connections**

Lebedev, A., Forchhammer, S., Tafur Monroy, I., Vegas Olmos, J. J., Zibar, D., Jensen, O. R. & Schaeffer, C. G. 01/09/2010 → 26/11/2013

Project: PhD