Professor

Lilin Yi

Lilin Yi , Professor, Ph.D. Supervisor

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Biography

Lilin Yi received his B.S. (2002) and M.S. (2005) from Shanghai Jiao Tong University (SJTU). He achieved Ph.D. degree from EcoleNationaleSupérieure des Télécommunications (ENST), France and SJTU, China on Mar. and Jun. 2008 respectively as a joint-educated PhD student. After graduation, he worked at Oclaro (after Avanex and Bookham merger) R&D center as a product development manager, presided Alcatel-Lucent 100G novel optical amplifier and Avanex next generation optical amplification platform projects. Since 2010, he has joined the State Key Laboratory of Advanced Optical Communication Systems and Network, SJTU. His research interests are novel optical access networks and photonic information processing. He has published more than 60 papers in peer-reviewed technical journals and conferences. His authored papers have been cited by SCI more than 280 times. His papers have been positively citedby Books "Slow light: Science and Applications" (CRC press), "Fiber-Optic Communication Systems, Fourth Edition" (WILEY press), "Advances in Optical Amplifiers" (INTEC press) and multiple review papers including Nature Photonics. He has achieved "The excellent master thesis" in shanghai on 2007 and "The excellent PhD thesis" awards in China on 2010. Currently he is IEEE/OSA member and the active reviewer for IEEE Photonics Technology Letters, IEEE/OSA Journal of Lightwave Technology, Optics Letters and Optics Express.

Honors

1. 2011 "Chen Guang Youth Scholar" in Shanghai
2. 2011 "SMC Youth Scholar" in Shanghai Jiao Tong University
3. 2010 National Excellent Ph.D Thesis
4. 2009 Shanghai Excellent Ph.D Thesis
5. 2009 Oclaro Outstanding Employee
6. 2008 Avanex Outstanding Employee
7. 2007 SPIE APOC(Asia-pacific Optical Communication) Best Student Paper
8. 2007 Shanghai Excellent Master Thesis

Research Areas

1. Novel 0ptical access networks
2. Photonics information processing

Future Ready Optical Network Technology Research Group (FRONT): http://front.sjtu.edu.cn

Selected Publications

1. Zhengxuan Li, Lilin Yi, and Weisheng Hu, "Key technologies and system demonstrations of TWDM-PON," to be published on Frontier of Optoelectronics (Invited Review).
2. Lilin Yi, Tao Zhang, Zhengxuan Li, Junhe Zhou, Yi Dong and Weisheng Hu, "Secure optical communication using stimulated Brillouin scattering in optical fiber," Optics Communications, vol. 290, pp.146-151, 2013.
3. Zhengxuan Li, Lilin Yi, Meihua Bi, Jun Li, Hao He, Xuelin Yang, Weisheng Hu, "Experimental demonstration of a symmetric 40-Gb/s TWDM-PON," Optical Fiber Communication Conference and Exhibition (OFC/NFOEC), Anaheim, USA, Mar. 2013, paper. NTh4F.3.
4. Lilin Yi, Zhengxuan Li, Yi Dong ,Shilin Xiao, Jian Chen and Weisheng Hu, "Upstream capacity upgrade in TDM-PON using RSOA based fiber ring laser," Optics Express, vol. 20, pp.10416-10425, 2012.
5. Zhengxuan Li, Lilin Yi, Yan Zhang, Yi Dong, Shilin Xiao and Weisheng Hu, "Compatible TDM/WDM PON using a Single Tunable Optical Filter for both Downstream Wavelength Selection and Upstream Wavelength Generation," IEEE Photonics Technology Letters, vol.24,pp.797-799,2012.

6. Lilin Yi, Zhengxuan Li, Yi Dong, Shilin Xiao and Weisheng Hu, "Optical Network Unit Design for TWDM-PON," International Photonics and OptoElectronics Meetings (POEM2012), Wuhang, China, Nov. 2012. (invited)
7. Zhengxuan Li, Lilin Yi, Yan Zhang, Yi Dong, Shilin Xiao and Weisheng Hu, "Reduction of back-reflection induced crosstalk in multi-wavelength PON by using spectral red-shifted, tunable upstream fiber laser based on RSOA," Optical Fiber Communication Conference and Exhibition (OFC/NFOEC 2012). Los Angeles, USA, Mar. 2012, paper.OM2I.2
8. LilinYi , Tao Zhang, and Weisheng Hu, "High speed data encryption and decryption using Stimulated Brillouin Scattering in optical fiber," SPIE International Conference on Optical Instrument & Technology(OIT2011), Beijing, China, Nov. 2011, paper 8198-12. (invited)
9. Lilin Yi, Weisheng Hu, Yi Dong, Yaohui Jin, Wei Guo, and Weiqiang Sun, "A polarization-independent subnanosecond 2´2 multicast-capable optical switch using a sagnac interferometer," IEEE Photon. Technol. Lett. vol. 20, pp. 539-541, 2008.
10. Lilin Yi, Yves Jaouen, Weisheng Hu, Junhe Zhou, Yikai Su and ErwanPincemin, "Simultaneous demodulation and tunable-delay of DPSK signals using SBS-based optical filtering in fiber," Optics Letters, vol. 32, no. 21, pp. 3182-3184, 2007.
11. Lilin Yi, Yves Jaouen, Weisheng Hu, Yikai Su and SébastienBigo, "Improved slow-light performance of 10 Gb/s NRZ, PSBT and DPSK signals in fiber broadband SBS," Optics Express，vol. 15, no. 25, pp. 16972-16979, 2007.
12. Lilin Yi, Li Zhan, Weisheng Hu, Yuxing Xia, "Delay of broadband signals using slow light in stimulated Brillouin scattering with phase-modulated pump," IEEE Photon. Technol. Lett. vol. 19, no. 8, pp. 619-621, 2007.
13. Lilin Yi, Weisheng Hu, Yikai Su, MingyiGao, and LufengLeng, "Design and system demonstration of a tunable slow-light delay line based on fiber parametric process," IEEE Photon. Technol. Lett. vol. 18, no. 24, pp. 2575-2577, 2006.
14. Lilin Yi, Li Zhan, Weisheng Hu, Qianxin Tang, Yuxing Xia, "Tunable, gain-clamped double-pass Erbium-doped fiber amplifier," Optics Express vol. 14, no.2, pp. 570-574, 2006.
15. Lilin Yi, Li Zhan, Weisheng Hu, Peigang Hu, Yikai Su, and LufengLeng, "A Highly Stable Low-RIN Hybrid Brillouin-Erbium Amplified Laser Source," IEEE Photon. Technol. Lett. vol. 18, no. 9, pp.1028-1030, 2006.

Books and Patents

1. Owned 5 Chinese patents and another 6 Chinese patents are pending

Courses

1. Bachelor Course: "Fiber-optic Communications and System Design"
2. Master Course: "Waveguide Optics"

Active Grants& Projects

1. Nature Science Foundation China: "Stimulated Brillouin Scattering based Secure Optical Communications"
2. Nature Science Foundation China:"OFDM-PON Theory and Key Technologies"
3. Program of Excellent PhD in China: "Broadband OFDM-PON Theory and System Demonstration"
4. Industrial sponsored program: Graphene based Optoelectronics Devices

Editorships

Associate Editor for International Journal of Advances in Optical Communication and Networks, 2011