**Xijia Gu’s recent Publications and Submissions (Since July 2010)**

**REFERRED JOURNAL PUBLICATIONS AND SUBMISSIONS:**

91) Meng Wang, Yujing Zhang, Zefeng Wang, Junjie Zun, Jianqiu Cao Jinyong Leng, Xijia Gu and Xiaojun Xu, “Fabrication of chirped and tilted fiber Bragg gratings and suppression of stimulated Raman scattering in fiber amplifiers,” Optical Society of America, Optics Express, Vol. 25, No.2, pp 1529-1534, Jan. 2017.

90) Lei Zhang, Huawei Jiang, Xuezong Yang, Xijia Gu and Yan Feng, “High power single frequency 1336 nm Raman fiber amplifier”, IEEE Journal of Lightwave Technology, Vol. 34, No. 21, pp4907-4911, Nov. 2016.

89) Man Jiang, Haiyang Xu, Pu Zhou, Guoming Zhao, and Xijia Gu “All-fiber, narrow linewidth and linearly polarized fiber laser in a single-mode-multimode-single-mode-cavity”, Optical Society of America, Applied Optics, Vol. 55, No22, pp6121-6124, August, 2016.

### 88) Wei, Fang; Yang, Fei; Zhang, Xi; Xu, Dan; Ding, Meng; Zhang, Li; Chen, Dijun; Cai, Haiwen; Fang, Zujie and Xijia, Gu, “[Subkilohertz linewidth reduction of a DFB diode laser using self-injection locking with a fiber Bragg grating Fabry-Perot cavity](https://www.osapublishing.org/oe/abstract.cfm?uri=oe-24-15-17406&origin=search),” Optical Society of America, Optics Express, Vol. 24, No.15, pp 17406-17415, July 2016

### 87) Huang, Yize; Jivraj, Jamil; Zhou, Jiaqi; Ramjist, Joel; Wong, Ronnie; Gu, Xijia and Yang, Victor X. D., “[Pulsed and CW adjustable 1942 nm single-mode all-fiber Tm-doped fiber laser system for surgical laser soft tissue ablation applications](https://www.osapublishing.org/oe/abstract.cfm?uri=oe-24-15-16674&origin=search),” Optical Society of America, Optics Express, Vol. 24, No.15, pp 16674-16686, July 2016

86) R. Morsy, H. Marzouk, X. Gu, A. Elshafey, “Use of the random decrement technirue for nondestructive detection of damage to beam,” Elsevier, Materials and Structures, Vol. (49), pp4719-354, 2016.

85) A. Elshafey, H. Marzouk, X. Gu, M. Haddara, R. Morsy, “Use of fiber Bragg grating array and random decrement for damage detection in steel beam,” Elsevier, Engineering Structures, Vol. (106), pp348-4727, 2016.

84) Jiaqi Zhou and Xijia Gu, “32 nJ, 615 fs stable dissipative soliton ring cavity fiber laser with Raman scattering,” IEEE Photonics Technology Letters, Vol. 28, No.4, pp453-456, Feb. 2016.

83) Patrick Kanopoulos, Kaiwen Xia, Xijia Gu and Ardavan Amirchoupani, “A concrete erosion sensor based on a chirped fibre optic Bragg grating,” Review of Scientific Instruments, Vol. 86, p126107, Dec. 2015

82) Jiaqi Zhou, Yu Lu, Bing He and Xijia Gu, “Q-switched laser in an SMS cavity for inhibiting nonlinear effects”, Optical Society of America, Applied Optics, Vol. 54, No. 19, pp6080-6084, July 2015.

81) Jiaqi Zhou, Bing He and Xijia Gu, “Transmission spectrum characteristics for a single-mode-multimode-single-mode fiber filter”, IEEE Photonics Technology Letters, Vol. 26, No. 21, pp2185-2188, November. 2014.

80) Jiaqi Zhou, Bing He and Xijia Gu, “High efficiency single-mode-multimode-single-mode fiber laser with diffraction-limited beam output”, Optical Society of America, Applied Optics, Vol. 53, No. 24, pp5554-5558, August, 2014.

79) Lei Zhang, Chi Liu, Huawei Jiang,Yunfeng Qi, Bing He, Jun Zhou, Xijia Gu, and Yan Feng, “Kilowatt Ytterbium-Raman fiber laser,” Optical Society of America, Optics Express, Vol. 22, No.15, pp 18483-18489, July 2014

78) Lei Zhang, Jiaqi Zhou, Zhaokun Wang**,** Xijia Gu and Yan Feng, “SESAM mode-locked environmentally-stable and compact dissipative soliton fiber laser with a fiber loop mirror”, IEEE, Photonics Technology Letters, Vol. 26, No. 13, pp1314-1316, July 1, 2014.

77) Yi Lu and Xijia Gu, “Kilowatt peak power pulses from a passively Q-switched Yb-doped fiber laser with a smaller-core Yb-doped fiber as a saturable absorber”, IEEE Photonics Journal, Vol. 6, No.3, p1501207, June 2014.

76) A.R. EL-Damak, Jianhua Chang, Jian Sun, Changqing Xu and Xijia Gu, “Dual-Wavelength, Linearly Polarized All-Fiber Laser with High Extinction Ratio”, IEEE Photonics Journal, Vol. 5, No. 4, #1501406, August 2013.

# 75) [Yaqian Ding](http://www.col.org.cn/getAuthorList.aspx?au=Yaqian+Ding), [Yunfeng Qi](http://www.col.org.cn/getAuthorList.aspx?au=Yunfeng+Qi" \o "view this author's aritcles on COL), [Yuan Liu](http://www.col.org.cn/getAuthorList.aspx?au=Yuan+Liu), [Fuyang Jia](http://www.col.org.cn/getAuthorList.aspx?au=Fuyang+Jia), [Kejia Wang](http://www.col.org.cn/getAuthorList.aspx?au=Kejia+Wang" \o "view this author's aritcles on COL), [Xijia Gu](http://www.col.org.cn/getAuthorList.aspx?au=Xijia+Gu" \o "view this author's aritcles on COL) and [Jun Zhou](http://www.col.org.cn/getAuthorList.aspx?au=Jun+Zhou) “Dual-wavelength fiber grating laser in linear overlapping cavity”, Chinese Optics Letters, Vol. 115, No. 12, # 120603, Dec.10, 2013.

74) Mohammand Saad, Lawrence R. Chen and Xijia Gu, “Highly Reflective Fiber Bragg Gratings Inscribed in Ce/Tm co-doped ZBLAN fibers,” IEEE, Photonics Technology Letters, Vol. 25, No. 11, pp1066-1068, June 2013.

73) Lei Zhang, Angie El-Damak, Yan Feng, and Xijia Gu, “Experimental and numerical studies of mode-locked fiber laser with large normal and anomalous dispersion”, Optical Society of America, Optics Express, Vol. 21, No.10, pp 12014-12021, May 2013.

72) Lei Zhang, Yan Feng, and Xijia Gu, “Wavelength-switchable dissipative soliton fiber laser with a chirped fiber grating stop-band filter,” IEEE Photonics Journal, Vol. 5, No. 2, #1500506, April 2013.

71) Yi Lu and Xijia Gu, “All-fiber Passively Q-switched Fiber Laser with a Sm-doped fiber Saturable Absorber,” Optical Society of America, Optics Express, Vol. 21, Issue 2, pp. 1997-2002, 2013.

70) B. Frison, A. R. Sarmani, L. R. Chen, X. Gu, and M. Saad, “Dual-wavelength S-band Tm3+:ZBLAN fibre laser with 0.6 nm wavelength spacing,” IEE, Electronics Letters, Vol. 49, issue 1, pp60-62, 2013.

69) Jianhua Wang, Jinmeng Hu, Lei Zhang,Xijia Gu, Jinbao Chen, and Yan Feng, “A 100 W all-fiber linearly-polarized Yb-doped single-mode fiber laser at 1120 nm”, Optical Society of America, Optics Express, Vol. 20, No. 27, pp28373-28378, Dec., 2012.

68) Jianhua Wang, Gui Chen, Lei Zhang, Jinmeng Hu, Jinyan Li, Bing He, Jinbao Chen, Xijia Gu, Jun Zhou, and Yan Feng, “High-efficiency fiber laser at 1018 nm using Yb-doped phosphosilicate fiber”, Optical Society of America, Applied Optics, Vol. 51, No. 29, pp7130-7133, Oct. 2012.

67) [Maria Iulia Comanici](http://www.hindawi.com/54803894/), [Lv Zhang](http://www.hindawi.com/80346597/), [Lawrence R. Chen](http://www.hindawi.com/70813741/), [Xijia Gu](http://www.hindawi.com/17415853/), [Lutang Wang](http://www.hindawi.com/64050864/), and [Peter Kung](http://www.hindawi.com/30205984/), “All-Fiber DBR-Based Sensor Interrogation System for Measuring Acoustic Waves”, Journal of Sensors, Volume 2012, Article ID 862078, 2012.

66) Jianhua Wang,Lei Zhang, Jinmeng Hu,Lei Si, Jinbao Chen, Xijia Gu and Yan Feng, **“**Efficient linearly polarized Yb-doped fiber laser at 1120 nm”, Optical Society of America, Applied Optics, Vol. 51, No. 17, pp3801, June 2012.

### 65) Lei Zhang, Jianhua Wang, Xijia Gu and Yan Feng, “[A linearly-Polarized Tunable Yb-doped Fiber Laser using a Polarization Dependent Fiber Loop Mirror](http://www.sciencedirect.com.ezproxy.lib.ryerson.ca/science/article/pii/S0030401812000272)”, *Elsevier, Optics Communications, Vol. 285*, pp2410-2413, 2012.

64) E. Rizk, H., Marzouk, A. Hussein and X. Gu, “Structural health monitoring of slab-column connections using FBG sensors”, Springer, Journal of Civil Structural Health Monitoring, Vol. 2, No. 1, DOI 10.1007/s13349-011-0014-8,Jan.19, 2012.

63) Saverio Avino, Jack Barnes, Gianluca Gagliardi, Xijia Gu, James R. Mester, Costa Nicholaou, Hans-Peter Loock, “Musical instrument pickup based on a frequency-locked fiber Fabry-Perot cavity”, Optical Society of America, *Optics Express*, Vol. 19, No. 25, pp 25057-25065, Dec., 2011.

62) Xijia Gu\*, Cheng Li, Aihan Feng and Daolun Chen, “**Application of Flat-clad Optical Fiber Bragg Grating Sensor in Characterization of Asymmetric Fatigue Deformation of Extruded Magnesium Alloy”,** IEEE, Sensors Journal, Vol. 11, No. 11, pp3042-3046, 2011.

61) Wu Wen-Di, Ren Ting-Qi, Zhou Jun, Du Song-Tao, GU Xi-Jia, Lou Qi-Hong, “Compact All-Fiber 102W Picosecond MOPA Laser with a Narrow Spectral Linewidth”, Chinese Physics Letters, Vol. 28, No. 11, 114206, 1-3, Nov. 2011.

60) Udari Basnayake, Xavier Fernando and Xijia Gu\*, “Single step Conversion from Optical Wave to Radio Wave in a Short Cavity Fiber Laser”, IEEE Photonics Technology Letter, VOL. 23, No. 20, October, pp1445, 2011.

59) Mark K.Harduar,Adrian Mariampillai,Barry Vuong, Xijia Gu, Beau A. Standish, Victor X.D. Yang, “Dual-core Ytterbium Fiber Amplifier for High Power 1060nm Swept Source Multichannel Optical Coherence Tomography Imaging”, Optical Society of America, Optics Letters, Vol. 36, No. 15, pp 2976-2978 (2011).

58) Zhen Li, Jun Zhou\*, Bing He, Xijia Gu, Yunrong Wei, Jingxing Dong and Qihong Lou, “Diode-pumped 1 018-nm ytterbium-doped double-clad fiber laser”, Chinese Optics Letters, Vol. 9, No. 9, pp 091401, September 2011.

57) Waleed Mohammed and Xijia Gu\*, “Fiber Bragg grating in Large-mode-area fiber for high power fiber laser applications”, Applied Optics, Vol. 49 (28), pp5297-5301, October, 2010.

56) Fan Yuanyuan, Zhou Jun, He Bing,Gu Xijia, Xue Yuhao, Li Zhen,Wei Yunrong, Dong Jingxing, Lou Qihong, “Preparation and High-Power Fiber Laser Experimentation of Double-Clad Fiber Grating”, Chinese Journal of Lasers, Vol. 37, No. 9, pp 2395-2399, 2010.

55) A.H. Feng, D.L. Chen, Cheng Li and Xijia Gu\*, “Flat-cladding Fiber Bragg Grating Sensors for Large Strain Amplitude Fatigue Tests”, *Sensors,* Vol. 10, pp7674-7680, August, 2010.

54) A.H. Feng, D.L. Chen, Cheng Li and Xijia Gu\*, “Localized Strain Measurement of Friction-Stir Welded Samples in Fatigue tests Using Flat-clad Fiber Bragg Grating Sensor”, IEEE, Sensors Journal, Vol. 10, No. 4, pp 888-892,April 2010.

53) Kyle H. Y. Cheng, Beau Standish, Victor Yang\*, K. K. Y. Cheung, Xijia Gu,
Edmund Y. Lam, K. K. Y. Wong, “Wavelength-swept spectral and pulse shaping utilizing hybrid Fourier domain mode-locking by fiber optical parametric and erbium-doped fiber

Amplifiers”, Optics Express, Vol. 18, No. 3, pp 1909-1915, Feb. 2010.

52) Dong Xue, Angie R. El-Damak and Xijia Gu\*, “All-fiber Single-polarization Yb-doped Fiber Laser with a high Extinction Ratio”, *Elsevier* *Optics Communications, Vol.* 283, pp1059–1061, (2010).

**PATENTS:**

5) Waleed Mohammed and Xijia Gu,

 “Shaping a laser beam with a fiber-based devices “US patent, pending, filed in Oct. 2007.

**REFERRED CONFERENCE PRESENTATIONS:**

39) Jiaqi Zhou and Xijia Gu (invited), “High pulse energy stable wave-break soliton in a long ring-cavity fiber laser,” Optical Society of America, Workshop on Specialty Optical Fibers and Their Applications (WSOF): Hong Kong, China, Nov. 4-6, 2015.

38) Jiaqi Zhou and Xijia Gu, “50.5 nJ, 750 fs all-fiber all polarization-maintaining fiber laser,” Conference on Lasers and Electro-Optics (CLEO), San Jose, CA, USA, May 11-15, 2015

37) Z. Yazdizadeh, H. Marzouk and X. Gu, “Use of FBG sensor for creep and shrinkage of concrete;” The American Concrete Institute ACI Washington Fall Meeting, October 25-28, 2014.

36) B. Frison, A. R. Sarmani, L. R. Chen, X. Gu, and M. Saad, "Multi-wavelength S-band Tm:ZBLAN fiber lasers," SPIE Photonics West, 2-7 February 2013, San Francisco, CA.

35) B. Frison, A. R. Sarmani, and L. R. Chen\_, X. Gu, S. Thomas and P. Longz, M. Saad, “Dual wavelength lasing at 800 nm in a Tm:ZBLAN fibre laser”, IEEE Photonics Conference, 23 Sep - 27 Sep 2012, Hyatt Regency San Francisco Airport, Burlingame, CA, USA

# 34) [Yuan-yuan Fan](http://profiles.spiedigitallibrary.org/summary.aspx?DOI=10.1117%2f12.900574&Name=Yuan-yuan+Fan),[Jun Zhou](http://profiles.spiedigitallibrary.org/summary.aspx?DOI=10.1117%2f12.900574&Name=Jun+Zhou),[,Bing He](http://profiles.spiedigitallibrary.org/summary.aspx?DOI=10.1117%2f12.900574&Name=Bing+He)[, Ji-tuo Zheng](http://profiles.spiedigitallibrary.org/summary.aspx?DOI=10.1117%2f12.900574&Name=Ji-tuo+Zheng),[; Hou-kang Liu](http://profiles.spiedigitallibrary.org/summary.aspx?DOI=10.1117%2f12.900574&Name=Hou-kang+Liu),  [Xijia Gu](http://profiles.spiedigitallibrary.org/summary.aspx?DOI=10.1117%2f12.900574&Name=Xi-jia+Gu), [Qi-hong Lou](http://profiles.spiedigitallibrary.org/summary.aspx?DOI=10.1117%2f12.900574&Name=Qi-hong+Lou), ”Preparation, package, and high-power fiber laser experiment of large mode-area fiber grating”

 *Proc. SPIE* 8192, International Symposium on Photoelectronic Detection and Imaging 2011, Beijing, China, May 24, 2011

### 33) [Songtao Du](http://ieeexplore.ieee.org.ezproxy.lib.ryerson.ca/search/searchresult.jsp?searchWithin=p_Authors:.QT.Songtao%20Du.QT.&searchWithin=p_Author_Ids:38245752800&newsearch=true), [Wendi Wu](http://ieeexplore.ieee.org.ezproxy.lib.ryerson.ca/search/searchresult.jsp?searchWithin=p_Authors:.QT.Wendi%20Wu.QT.&searchWithin=p_Author_Ids:38245899400&newsearch=true), [Jun Zhou](http://ieeexplore.ieee.org.ezproxy.lib.ryerson.ca/search/searchresult.jsp?searchWithin=p_Authors:.QT.Jun%20Zhou.QT.&searchWithin=p_Author_Ids:38245711200&newsearch=true),,[Jing He](http://ieeexplore.ieee.org.ezproxy.lib.ryerson.ca/search/searchresult.jsp?searchWithin=p_Authors:.QT.Jing%20He.QT.&searchWithin=p_Author_Ids:38245730600&newsearch=true), [Qihong Lou](http://ieeexplore.ieee.org.ezproxy.lib.ryerson.ca/search/searchresult.jsp?searchWithin=p_Authors:.QT.Qihong%20Lou.QT.&searchWithin=p_Author_Ids:37355979900&newsearch=true" \o "), [XijiaGu](http://ieeexplore.ieee.org.ezproxy.lib.ryerson.ca/search/searchresult.jsp?searchWithin=p_Authors:.QT.Xijia%20Gu.QT.&searchWithin=p_Author_Ids:38245570700&newsearch=true" \o "), “[102W picosecond all fiber one-stage MOPA laser](http://ieeexplore.ieee.org.ezproxy.lib.ryerson.ca/xpl/articleDetails.jsp?tp=&arnumber=6193737&refinements%3D4294967269%2C4292403457%26matchBoolean%3Dtrue%26searchField%3DSearch_All%26queryText%3D%28Xijia+Gu%29),” [Quantum Electronics Conference & Lasers and Electro-Optics (CLEO/IQEC/PACIFIC RIM), 2011,](http://ieeexplore.ieee.org.ezproxy.lib.ryerson.ca/xpl/mostRecentIssue.jsp?punumber=6189091) DOI: [10.1109/IQEC-CLEO.2011.6193737](http://dx.doi.org.ezproxy.lib.ryerson.ca/10.1109/IQEC-CLEO.2011.6193737), pp 355 – 356 (2011)

32) LV Zhang, Abdul Sarmani, Maria-Iulia Comanici, Lawrence Chen, Xijia Gu and Peter Kung, “Monitoring Multiple Strain Sensors Based on All-Fiber Distributed Bragg Reflector Lasers and Wavelength-to-Power Mapping”, IEEE Photonics Society Annual Meeting, Arlington, Virginia, October 9-13, 2011.

31) E. Rizk, H. Marzouk, X. Gu, and A. Hussein, “Structural health monitoring of offshore concrete structures usingFBG sensors”, First Middle East Conference on Smart Monitoring, Assessment and Rehabilitation of Civil Structures, 8-10 February 2011, Dubai, UAE.

30) Ahmed Elshafey, H. Marzouk, X. Gu and M. R. Haddara, “Non-destructive techniques for early damage detection for highway bridges using dynamic response”, First Middle East Conference on Smart Monitoring, Assessment and Rehabilitation of Civil Structures, 8-10 February 2011, Dubai, UAE.

29) K. H. Y. Cheng, B. A. Standish, V. X. D. Yang, K. K. Y. Cheung, X. Gu, E. Y. Lam, K. K. Y. Wong, “Hybrid Fourier domain modelocked laser utilizing a fiber optical parametric amplifier and an erbium doped fiber amplifier”, in *Proc. SPIE 7580*, Fiber lasers VII: Technology, Systems and Applications, San Francisco, Jan. 23-28, 2010.

28) B. Vuong, M. Harduar, K. H. Y. Cheng, X. Gu, L R. Chen,B. A. Standish, V. X. D. Yang, “Cascaded Raman fiber laser in Fourier domain mode lock operation”, in *Proc. SPIE 7580*, Fiber lasers VII: Technology, Systems and Applications, San Francisco, Jan. 23-28, 2010.

27) A. Mariampillai, B. Vuong, K.H.Y. Cheng, L.R. Chen, X. Gu, B.A. Standish, V.X.D. Yang and M.K. Harduar, "Dual core ytterbium doped fiber ring laser in Fourier domain mode locked operation for swept-source optical coherence tomography," in *Proc. SPIE 7580*, Fiber lasers VII: Technology, Systems and Applications, San Francisco, Jan. 23-28, 2010.