

Curriculum Vitae

Name: Gong-Ru Lin

Position: Professor and Chairman, Graduate Institute of Photonics and Optoelectronics,

Affiliation: Graduate Institute of Photonics and Optoelectronics, Department of Electrical Engineering, National Taiwan University, Taiwan

Telephone: +886-2-33663700 ext. 6519

Fax: +886-2-33669598

Email: grlin@ntu.edu.tw

Citation: 4600+([Google Scholar Citation](#)), 3650+([SCIE Web of Science](#))

H index: 35+([Google Scholar Citation](#)), 33+([Scie Web of Science](#))

I. Academic History:

❖Degrees Awarded

Ph.D. in Electro-optical Engineering, National Chiao Tung University, Hsinchu, Taiwan, 1996

M.S. in Electro-optical Engineering, National Chiao Tung University, Hsinchu, Taiwan, 1990

B.S. in Physics, Soochow University, Taipei, Taiwan, 1988

❖Employment History

1. 2013-2019, **Chairman**, Graduate Institute of Photonics and Optoelectronics, National Taiwan University, Taipei, Taiwan
2. 2007-2010, **Professor and Vice Chairman**, Graduate Institute of Photonics and Optoelectronics, National Taiwan University, Taipei, Taiwan.
3. 2006-Now, Professor, Graduate Institute of Electro-Optical Engineering and Department of Electrical Engineering, National Taiwan University, Taipei, Taiwan.
4. 2002-2006, Professor, Department of Photonics, National Chiao Tung University, Hsinchu, Taiwan.
5. 2001-2002, Associate Professor, Department of Electro-Optical Engineering, National Taipei University of Technology, Taipei, Taiwan.
6. 1998-2001, Associate Professor, Tatung University, Taipei, Taiwan.
7. 1997-1998, Assistant Professor, National United University (former name of National Liao-Ho College of Science and Commerce), Miaoli, Taiwan.
8. 1996-1997, Postdoctoral Research Fellow, National Science Council, Taiwan.
9. 1990-1992, Associate Engineer, Institute of Optical Industry, ITRI, Hsinchu, Taiwan.

❖Society Memberships

1. The IEEE Photonics (IEEE/PHO/ED/MTT/NC) Society, Senior Member since 2004, 25 years
2. The Optical Society of America (OSA), Member since 2000, 17 years, Fellow 2014
3. The International Society for Optical Engineering (SPIE), Fellow since 2008, 17 years
4. The Institute of Engineering and Technology (IET), Fellow since 2009, 10 years

5. The Institute of Physics (IOP), Fellow since 2010, 10 years
6. The Taiwan Photonics Society (TPS or ROCOS), President since 2017, Sub-Director since 2008, Life Member
7. The Chinese Institute of Electrical Engineering (CIEE), Life Member

II. Distinguished/Sustained Service to OSA and Other Community:

❖Editor and Referee of International Journals

1. 2016-Now, **Senior Editor**, IEEE Photonics Journal
2. 2015-2018, **Associate Editor**, IEEE Photonics Journal
3. 2010-2013, **Associate Editor**, OSA/IEEE Journal of Lightwave Technology
4. 2008-Now, **Associate Editor** of “Journal of Nanomaterials”, Hindawi Publishing Corporation. **SCI Impact Factor: 1.023**
5. 2007-Now, **Associate Editor** of “Current Nanoscience”, Bentham Science Publisher. **SCI Impact Factor: 2.08.**
6. Referee, **Optics/Photonics:** “Optics Express”, “Optics Letters”, “Journal of Optical Society of America B”, “Journal of Lightwave Technology”, “Applied Optics”, “IEEE Photonics Technology Letters”, “Optics Communications”, etc.
Physics/Electronics: “Applied Physics Letters”, “IEEE Electron Device Letters”, “IEEE Journal of Quantum Electronics”, “Current Nanoscience”, “Journal of Nanoscience and Nanotechnology”, “Journal of Nanomaterials”, and “Optical Engineering”.

❖Services to International Societies (2003-2011)

1. 2017-2020, **Taiwan Photonics Society (TPS), President**
2. 2010-2016, Taiwan Photonics Society (TPS), Board of Directors
3. 2010~Now, IEEE Photonics Society Board of Governors (BoG) Member
4. 2010~2013, Membership Subcommittee and Grants & Awards Subcommittee, OSA
5. 2009~2013, Member and Education Services Council, OSA
6. 2009~2013, **Member-at-large, OSA**
7. 2008~Now, IEEE MTT Society Ballot Member
8. 2002~Now, **IEEE Membership Council Committee**
9. 2008-2010, Chair of IEEE Photonics Taipei Chapter
10. 2006-2008, Vice Chair of IEEE LEOS Taipei Chapter
11. 2004-2006, Executive Secretary of IEEE LEOS Taipei Chapter
12. 2003-2005, Awards Committee of SPIE.

❖Serving Committees of International Conferences (past 5 years)

1. 2008-2013, **Steering Committee** of OSA/IEEE Pacific-Rim Conference on Lasers and Electro-Optics (CLEO-PR).
2. 2008-2014, **Steering Committee** of IEEE Asia-Pacific Microwave Photonics Conference

- (APMP).
3. 2007-now, **Technical Program Committee Chair (2007)** and TPC Member (2011) of IEEE/LEOS Workshop on Fibers and Passive Optical Components (WFOPC).
 4. 2007-now, TPC Member of IEEE/LEOS Optical MEMS and NanoPhotonics (OMEMS&NP 2007).
 5. 2007-2008, TPC Member of 2007 OSA Topical Meeting on Nanophotonics (2007~2008).
 6. 2009-now, TPC Member of the OSA/IEEE sponsored Optoelectronics and Communication Conference (OECC)
 7. 2009-now, TPC Member of the OSA sponsored Asia Communications and Photonics Conference (ACP)
 8. 2009-now, TPC Member of the IEEE sponsored International Conference on Advanced Infocomm Technology (IEEE ICAIT)

III. Featured Awards and/or Honors:

❖National Awards

1. **2016, Distinguished Research Award** of National Science Council in Taiwan.
(The most representative award with only 1-2 recipients or 0.1% of the PIs in Taiwan's photonics area each year, almost all of the recipients are OSA or IEEE Fellows)
2. **2011, Distinguished Research Award** of National Science Council in Taiwan.
(The most representative award with only 1-2 recipients or 0.1% of the PIs in Taiwan's photonics area each year, almost all of the recipients are OSA or IEEE Fellows)
3. 1997/1998/2000, **Researching Awards** of National Science Council in Taiwan.
(Only <3% recipients each year from the PIs of the Photonics field in Taiwan)

❖International Honors:

1. **2014, Fellow of the Optical Society of America (OSA)**
2. **2010, Fellow of the Institute of Physics (IOP)**
3. **2009, Fellow of the Institute of Engineering and Technology IET (formerly IEE)**
4. **2008, Fellow of SPIE**
5. **2004, Senior Member of IEEE LEOS Society**

❖Scholar Indices or Certifications:

1. **H Index: 33 (by Google Scholar Citation) 32 (by SCIE, Web of Science, 1994-2017)**
2. **Total Citation Number: 4400+ (Google) 3300+ (SCIE, 1994-2017),**
3. **Highest Citation Time per paper: 197**
4. **Publication Statistics: SCI 300+ (Web of Science), EI 500+ (Electron Village EiV2)**
5. **Virtual Journal Selected paper number: 26 (by VJs in Science and Technology)**

❖Local Academic Awards

1. 2005, **Excellent Young Engineers Award** of Chinese Institute of Electrical Engineering.
(Only 10 recipients each year from the whole academic community of Taiwan)
2. 2005, **Third Hsu Yu-Ziang Paper Award of Science and Technology in**

Communications, Taiwan. (The most competitive awards among non-academic associations in Taiwan with **only 1 recipient per year**)

3. 2000, **Tien Jea Bien Young Scholar Prize by the Optical Engineering Society of ROC**. (The most representative youth scholar award in Taiwan with **only 1 recipient in this year**).
4. 1999/2000, Excellent Research Awards of Hsieh-Chih Association in Taiwan. (only 1 recipient from the Photonics field in Taiwan per year)

❖ *Faculty Honors among Domestic Universities*

1. 2015, **Distinguished Professor** of National Taiwan University
2. 2014, **Outstanding Professor** of National Taiwan University
3. 2005, Young Scholar Award of National Chiao Tung University, Taiwan. (**The first winner of this award in NCTU, Taiwan**)
4. 2002, Outstanding Research Award of National Taipei University of Technology. (**Only 1 recipient in this year**)
5. 1998, Excellent Teaching Award of Tatung University, Taiwan. (Two recipients)

IV. Outstanding Professional Accomplishments:

❖ *Major Research Fields:*

1. Group IV semiconductor dots for nano-photonic emission, absorption, amplification and processing applications.
2. Fundamentals of Si-rich SiO_x/SiN_x/SiC_x/SiGe_x or C-rich SiC_x/SiC_xGe_y and their applications in Si Nonophotonics.
3. Applications of versatile semiconductor laser diode including weak-resonant-cavity FPLDs, dual-mode DFBLDs, few-mode VCSELs in communications.
4. Photonic pulsating systems and instruments such as harmonic mode-locking fiber lasers, ultra-short pulsed semiconductor lasers, and ultrafast sampling systems.
5. NRZ/RZ-OOK/PSK, PAM and QAM-OFDM data-format transmission and conversion in DWDM-PON with injection-locking laser diodes and amplifiers.
6. Semiconductor photonic and nano-photonic devices for fiber-optic systems and optical-interconnect applications.
7. Semiconductor quantum-dot LDs/amplifiers based photonic module to implement all-optical data-format conversion and decision gate logics
8. Silicon nanocrystal based LEDs and waveguide amplifiers, and the Arsenic nano-cluster doped GaAs ultrafast optoelectronic switches
9. Interaction and control of photons and electrons in semiconductor devices for generation, clock, phase and timing control.

❖ *Technical Achievements*

Semiconductor photonic devices and systems for multi-functionalities such as light emission, amplification, switching, data conversion, pulsation and sampling:

1. **Emission:** Development and accurate analysis of luminescent mechanisms of Si nano-crystal light emitters. First paper to demonstrate a Si nano-crystal embedded MOSLED that delivers multi-color electroluminescence up to 1 μ W with external quantum efficiency >0.2%. (worldwide record at the time). (*OSA JLT* 6, 1486-1491, 2008, and *JAP* 97, 094306, 2005, and *IEEE JQE* 41, 441-447, 2005) The related publications have been cited more than 300 times with the highest one of 65 times.
2. **Emission:** The first blue-light electroluminescent MOSLED using the Si-rich SiO_x film with buried Si nano-crystal diameter as small as 1.7 nm via the development of spatially confined PECVD synthesis Si nanocrystals in ameliorated Si nanostructures. First demonstration on “luminescent wavelength tunable Si nanocrystal for blue-light MOSLEDs” by synthesizing quantum-confined “1.7-nm large Si nanocrystals” within the SiO_x film. (*Opt. Express* 18, 4449-4456, 2010)
3. **Amplification:** Demonstration of “Si nanocrystal embedded SiO_x strip-loaded waveguide amplifier with gain coefficient of 65-85 cm⁻¹” and the laser diode injection diagnosis of small-signal power gain up to 15 dB. This is the first demonstration worldwide on the small-signal power gain analysis of the Si nano-crystal embedded Si-rich SiO_x waveguide amplifier for future optical interconnects. The waveguide amplifiers with gain spectrum in red, yellow, and blue wavelength regions were obtained. (*Opt. Express* 18, 9213-9219, 2010 and *APL* 95, 021106, 2009).
4. **Depolarization:** Innovative use of a semi-classical multi-layer graded-index model on the theoretical elucidation of the preliminary observation of “surface nonlinear depolarization effect” of the anti-glare Si nano-pillars employed as the surface of LEDs or solar cells. (*Opt. Express* 17, 20824-20832, 2009) This model was also used to simulate wavelength dependent ultra-low surface reflectance spectrum with diminishing Brewster angle.
5. **Conversion:** “Semiconductor quantum-dot laser diode or optical amplifier based optical data format conversion or mode-locking fiber laser using dark-optical-comb injection-locking”. Related publications (*Optics Express*, 12, 2017-2026, 2004, *Optics Express* 12, 4449-4456, 2004, *Optics Express*, 13, 1008-1014, 2005, *Optics Letters* 31, 1376-1378, 2006, etc.) have received 100 citations internationally. This investigation subsequently led to the milestone work of “50-fs soliton pulse” (the world new record, all published in *Optics Express* and *Optics Letters* from 2004-2010). A representative work was awarded as the Third Hsu Yu-Ziang Best Paper Award of Science and Technology in recognition of its unique contribution to the all-optical data processing.
6. **Switching:** The pioneer work demonstrated the “sub-picosecond carrier lifetime” and “picosecond optoelectronic switching” responses of “arsenic nano-cluster doped GaAs” material. (*APL*, 67, 3465-3467, 1995). This paper has received 54 citations and related papers receive total citation number up to 150.
7. **Switching:** The pioneer work on the “Gold-in-Ga₂O₃ peapod nanowires based nanophotonic switch” with photoconductive responses. (*Nano Lett.* 8, 3081-3085, 2008, 29 citations in three years) This work was published only two years with a rapidly increasing citation rate.
8. **Pulsation:** Employing the carbon-nanotube/PVA composite for passively mode-locking the Er-doped fiber lasers (*Opt. Express*, 18, 3592-3600, 2010). This achievement is based on

his previous work of “Study the pulse steepening effect of a 29-fs passively mode-locked Er-doped soliton fiber laser via pre-chirped amplification compression technology” (*Opt. Lett.* 31, 1382-1384, 2006. *Selected by Virtual J. Ultrafast Sci.* 5, No. 7, 2006). Earlier mode-locking laser work was quoted by Dr. Jeff Hecht’s historical review article published in *Photonics Spectra* 2004.

❖ **Technical Management and Leadership**

Prof. Lin was successively elected by peers in Taiwan’s photonics community to take responsible of the administrative affairs in several branches of the international or Taiwan’s photonics societies.

1. 2009-now, Sub-Director Board of the Taiwan Photonics Society (TPS in Taiwan).
2. 2008-2010, Chair of IEEE Photonics Taipei Chapter.
3. 2006-2008, Vice Chair of IEEE LEOS Taipei Chapter.
4. 2004-2006, Executive Secretary of IEEE LEOS Taipei Chapter
5. 2006-2008, Vice Chair of the SPIE Taiwan Chapter.
6. 2004-2006, Secretary of SPIE Taiwan Chapter.
7. 2004-2006, Executive Secretary of the SPIE, Taiwan Chapter.

IV. Featured Publications and Citation Statistics:

(within his 15-year academic career around 5 Taiwan universities)

Prof. Lin has published more than 170 journal papers, 58 published by OSA, 40 by IEEE, 29 by AIP, and 50 by others. Among them, 26 journal papers have also been selected by Virtual Journals of NanoScience & Technology, and Ultrafast Science. In the database of the “ISI Web of Knowledge” published by Thomson Reuters, these publications have **total citation number more than 4600+ times**, and Prof. Lin currently owns an **H-index of 35+** recorded by Google Scholar Citations, (C>3600 and H>33 in the database of “SCIE, Web of Science”). In his specialized field of “**semiconductor photonic and nano-photonic devices for fiber-optic and optical-interconnect system applications**”, the highly cited papers are listed as below.

❖ **Highly Cited Papers (H Index of 35, total citation number almost 4600)**

(These are obtained from the ISI Web of Science published by Thomson Reuters, which is the worldwide recognized SCIE database with SCI recorded journal impact factors, author H-index and paper citation statistics.)

1. G.-R. Lin, C. J. Lin, C. K. Lin, et al., “Oxygen defect and Si nanocrystal dependent white-light and near-infrared electroluminescence of Si-implanted and plasma-enhanced chemical-vapor deposition-grown Si-rich SiO₂,” *Journal of Applied Physics*, 97, 094306, 2005. **Citations: 197**
2. P.L. Huang, S.C. Lin, C.Y. Yeh, H.H. Kuo, S.H. Huang, G.-R. Lin, L.J. Li, C.Y. Su, W.H. Cheng, “Stable mode-locked fiber laser based on CVD fabricated graphene saturable absorber,” *Optics Express* 20 (3), 2460-2465, 2012. **Citation: 114**

3. C.H. Hsieh, L.J. Chou, G.-R. Lin, Y. Bando, D. Golberg, "Nanophotonic switch: gold-in-Ga₂O₃ peapod nanowires," *Nano Letters* 8 (10), 3081-3085, 2008. **Citation: 97**
4. YH Lin, CY Yang, JH Liou, CP Yu, GR Lin, "Using graphene nano-particle embedded in photonic crystal fiber for evanescent wave mode-locking of fiber laser" *Optics express* 21 (14), 16763-16776. **Citation: 84**
5. F. Ganikhanov, G.-R. Lin, W. C. Chen, et al., "Sub-picosecond carrier lifetimes in Arsenic-ion-implanted GaAs," *Applied Physics Letters*, 67, 3465-3467, 1995. **Citations: 83**
6. G.-R. Lin, YC Lin, "Directly exfoliated and imprinted graphite nano-particle saturable absorber for passive mode-locking erbium-doped fiber laser," *Laser Physics Letters* 8 (12), 880, 2011. **Citation: 78**
7. G.-R. Lin, Y. H. Pai, C. T. Lin, C.C. Chen, "Comparison on the electroluminescence of Si-rich SiN_x and SiO_x based light-emitting diodes," *Applied Physics Letters* 96 (26), 263514, 2010. **Citation: 76**
8. G.-R. Lin, C. J. Lin, and H. C. Kuo, "Improving carrier transport and light emission in a silicon-nanocrystal based MOS light-emitting diode on silicon nanopillar array," *Applied Physics Letters*, 91, 093122, 2007. **Citations: 76**
9. Y. A. Dai, H. C. Chang, K. Y. Lai, C. A. Lin, R. J. Chung, G. R. Lin, J. H. He, "Subwavelength Si nanowire arrays for self-cleaning antireflection coatings," *Journal of Materials Chemistry* 20 (48), 10924-10930, 2010. **Citation: 65**
10. C. J. Lin and G.-R. Lin, "Defect-enhanced visible electroluminescence of multi-energy silicon-implanted silicon dioxide film," *IEEE Journal of Quantum Electronics*, 41, 441-447, 2005. **Citations: 63**
11. YH Lin, CY Yang, SF Lin, WH Tseng, Q Bao, CI Wu, and G.-R. Lin, "Soliton compression of the erbium-doped fiber laser weakly started mode-locking by nanoscale p-type Bi₂Te₃ topological insulator particles," *Laser Physics Letters* 11 (5), 055107, 2014. **Citation: 62**
12. C. Y. Chen, C. A. Lin, M. J. Chen, G. R. Lin, J. H. He, "ZnO/Al₂O₃ core-shell nanorod arrays: growth, structural characterization, and luminescent properties," *Nanotechnology* 20 (18), 185605, 2009. **Citation: 61**
13. Y. C. Chang, Y. H. Lin, J. H. Chen, and G.-R. Lin, "All-optical NRZ-to-PRZ format transformer with an injection-locked Fabry-Perot laser diode at un-lasing condition," *Optics Express* 12, 4449-4456, 2004. **Citations: 57**
14. G.-R. Lin; Y. S. Liao, and G. Q. Xia, "Dynamics of optical backward-injection-induced gain-depletion modulation and mode locking in semiconductor optical amplifier fiber lasers," *Optics Express*, 12, 2017-2026, 2004. **Citations: 56**
15. G.-R. Lin, Y.-C. Chang, E.-S. Liu et al. "Low refractive index Si nanopillars on Si substrate," *Appl. Phys. Lett.* 90, 181923, 2007. **Citations: 56**
16. G.-R. Lin, C. J. Lin, and C. K. Lin, "Enhanced Fowler-Nordheim tunneling effect in G.-R. Lin, C. J. Lin, K. C. Yu, et al., "Time-resolved photoluminescence and capacitance-voltage analysis of the neutral vacancy defect in silicon implanted SiO₂ on silicon substrate," *Journal of Applied Physics*, 96, 3025-3027, 2004. **Citations: 54**
17. nanocrystallite Si based LED with interfacial Si nano-pyramids," *Optics Express*, 15, 2555-2563, 2007. **Citations: 53**
18. JC Chiu, YF Lan, CM Chang, XZ Chen, CY Yeh, CK Lee, G.-R. Lin, JJ Lin, WH Cheng,

- “Concentration effect of carbon nanotube based saturable absorber on stabilizing and shortening mode-locked pulse,” *Optics Express* 18 (4), 3592-3600, 2010. **Citation: 52**
19. G.-R. Lin, YC Chang, JR Wu, “Rational harmonic mode-locking of erbium-doped fiber laser YC Chi, DH Hsieh, CT Tsai, HY Chen, HC Kuo, and G.-R. Lin, “450-nm GaN laser diode enables high-speed visible light communication with 9-Gbps QAM-OFDM,” *Optics Express* 23 (10), 13051-13059, 2015. **Citation: 50**
 20. G.-R. Lin; I. H. Chiu, and M. C. Wu, “1.2-ps mode-locked semiconductor optical amplifier fiber laser pulses generated by 60-ps backward dark-optical comb injection and soliton compression,” *Optics Express*, 13, 1008-1014, 2005. **Citations: 49**
 21. G.-R. Lin, YC Chang, JR Wu, “Rational harmonic mode-locking of erbium-doped fiber laser at 40 GHz using a loss-modulated Fabry-Perot laser diode” *IEEE Photonics Technology Letters*, 16 (8), 1810-1812, 2004. **Citation: 45**
 22. CH Cheng, YC Lien, CL Wu, G.-R. Lin, “Multicolor electroluminescent Si quantum dots embedded in SiO₂ thin film MOSLED with 2.4% external quantum efficiency,” *Optics Express* 21 (1), 391-403, 2013. **Citation: 45**
 23. G.-R. Lin, K. C. Yu, and Y. C. Chang, “10 Gbit/s all-optical non-return to zero-return-to-zero data format conversion based on a backward dark-optical-comb injected semiconductor optical amplifier,” *Optics Letters* 31, 1376-1378, 2006. **Citations: 43**
 24. G.-R. Lin and C. J. Lin, “Improved blue-green electroluminescence of metal-oxide-semiconductor diode fabricated on multi-recipe Si-implanted and annealed SiO₂/Si substrate,” *Journal of Applied Physics*, 95, 8484-8486, 2004. **Citations: 40**
 25. GR Lin, YH Pai, CT Lin, “Microwatt MOSLED Using SiO_x With Buried Si Nanocrystals on Si Nano-Pillar Array,” *Journal of Lightwave Technology* 26 (11), 1486-1491, 2008. **Citation: 40**

❖Invited Papers

1. Gong-Ru Lin, “Spectroscopic analysis on metal-oxide-semiconductor light-emitting diodes with buried Si nanocrystals and nano-pyramids in SiO_x film”, Invited Paper, *Journal of Nanoscience and Nanotechnology*, 8(3), 1092-1100, Mar. 2008.
2. Gong-Ru Lin, “Enabling light emission from Si based MOSLED on surface nano-roughened Si substrate”, Invited Paper, *IEICE Transactions on Electronics*, E91C(2), 173-180, Feb. 2008.

❖Book Chapters

1. Ci-Ling Pan, Gong-Ru Lin, Jia-Min Shieh, Chia-Wen Tsai, et al. “Electro-Optic Characterization of Microwave Standing Waves in a GaAs Transmission Line by Using a Novel Phase Analyzing Technique”, in *Current Research on Optical Materials, Devices and Systems in Taiwan, Selected Topics in Electronic and Systems*, Vol. 12, pp. 145-158, S. Chi and T. P. Lee Ed., World Scientific Publishing Co Ltd., 1998.

❖Patent Disclosures:

1. Y.-S. Liao, C.-T. Liao, and G.-R. Lin, “Simplified Optical Transceiver Sensitivity Diagnostic System Based on Frequency Inter-mixing Technique”, ROC Patent# 226762.

2. G.-R. Lin and Y.-C. Chang, “Pulse Delay-time Tunable Semiconductor Laser Diode Source”, ROC Issue 090102010, Patent#508879.

❖ **Selected Invited Talks (2006-2010):**

1. G.-R. Lin, “DWDM Channelized Pulsed Carrier Generated from Optical Injection Mode-Locked Weak-Resonant Laser Diode Based Fiber Ring Laser System”, International Conference on Materials for Advanced Technologies 2009 (**MRS ICMAT**), Symposium P: Optical Fiber Devices and Applications, Invited Paper, 28 June - 3 July 2009, Singapore.
2. H.-L. Wang, Y.-H. Huang, G.-C. Lin, S.-C. Ko, J.-W. Liaw, and G.-R. Lin, “Key Issues in WDM-PON Technology,” Invited Talk, 2008 International Symposium on Technologies for High-Capacity Optical Communications (ISTHCOC 2008), Taiwan, Nov. 19, 2008.
3. G.-R. Lin, “Optical injection mode-locking and DWDM channeling characteristics of weak-resonant-cavity FPLD-based fiber ring lasers”, 2008 Asia-Pacific Optical and Wireless Communications Conference and Exhibition (**SPIE APOC 2008**), Invited paper, China, October 29, 2008.
4. G.-R. Lin, “Enabling Microwatt power emission with Si nanocrystals based LED”, 2007 International Workshop on Applied Optics and Nanophotonics (IWAON2007), Invited Talk, Taiwan, Nov. 29-Dec. 1, 2007.
5. G.-R. Lin and C.-J. Lin, “Silicon Nanocrystal Based MOSLED on Silicon Nanopillar Array”, 7th IEEE International Conference on Nanotechnology (**IEEE-NANO2007**), invited paper, Hong Kong, Aug. 2-5, 2007.
6. G.-R. Lin, “Enhanced Electroluminescence from Nanocrystallite Si Based MOSLED by Interfacial Si Nanopyramids”, OSA Topical Conference on Nanophotonics (**OSA NANO2007**), China, June 18-21, 2007.
7. G.-R. Lin, “All-Optical 10Gbit/s Data Format Conversion in Temporally Gain Shaped Semiconductor Optical Amplifier”, 2007 Symposium on Next-Generation Lightwave Communications, Invited talk, Hong Kong, June 11-13, 2007.
8. G.-R. Lin, “All-in-one Amplified Compressor for Sub-50fs Soliton Generation from Mode-Locked Fiber Lasers”, 2007 Asia-Pacific Microwave Photonics Conference (**IEEE APMP 2007**), Korea, April 25-27, 2007
9. G.-R. Lin, “Nanocrystallite Si Based MOS light Emitting Diodes”, 4th U.S. Air Force-Taiwan Nanoscience Initiative Workshop, Invited Talk, Houston TX, USA, February 8-9, 2007.
10. G.-R. Lin, “All-Optical NRZ-to-RZ Data Format Conversion with Optically Injected Laser Diodes or Semiconductor Optical Amplifiers”, 2006 Asia-Pacific Optical and Wireless Communications Conference and Exhibition (**SPIE APOC 2006**), Invited paper, Korea, September 3-7, 2006.
11. G.-R. Lin, “White-light and near-infrared electroluminescence of furnace or CO₂ laser annealed Si-rich SiO₂ with structural defects and Si nanocrystals”, 2006 SPIE Symposium on Photonics Europe (**SPIE PE 2006**), paper 6195-32, Strasbourg, France, April 3-6, 2006.

V. Complete Publication List (1993-2011)

(A) 期刊論文

SCI 與 EI 選錄期刊論文 (SCI: 250+, EI: 400+)

SC EI NO. Author/Title/Journal

SCI F

I

Invited Journal Papers

2. Gong-Ru Lin, "Spectroscopic analysis on metal-oxide-semiconductor light-emitting diodes with buried Si nanocrystals and nano-pyramids in SiOx film", Invited Paper, *Journal of Nanoscience and Nanotechnology*, 8(3), 1092-1100, Mar. 2008. (Sole and Corresponding Author)
1. Gong-Ru Lin, "Enabling light emission from Si based MOSLED on surface nano-roughened Si substrate", Invited Paper, *IEICE Transactions on Electronics*, E91C(2), 173-180, Feb. 2008. (Sole and Corresponding Author)

Refereed Journal Papers

2015 (SCI:XX)

- ❖ ★ 307. Yi-Cheng Lee, Cheng-Ting Tsai, Yu-Chieh Chi, Yung-Hsiang Lin, and Gong-Ru Lin*, "Chirp manipulation of harmonically mode-locked weak-resonant-cavity colorless laser diode with external fiber ring," *IEEE Journal of Quantum Electronics*, Accepted, 2014. 1.830
- ❖ ★ 306. Yu-Chuan Su, Yu-Chieh Chi, Hsiang-Yu Chen, and Gong-Ru Lin*, "All Colorless FPLD Based Bidirectional Full-duplex DWDM-PON," *Journal of Lightwave Technology, Special Issue on Optical Interconnects*, Accepted, 2014. 2.555
- ❖ ★ 305. Yu-Chuan Su, Yu-Chieh Chi, Shih-Ying Lin, Yi-Cheng Li, Cheng-Ting Tsai, Hai-Lin Wang, Gong-Cheng Lin, and Gong-Ru Lin*, "Effect of Injection Coherence on Noise and Bandwidth of Long-cavity Colorless Laser Diode for Digital Modulation and Transmission" *IEEE Journal of Quantum Electronics*, Accepted, 2014 2.113
- ❖ ★ 304. Yung-Hsiang Lin, Chun-Yu Yang, Sheng-Fong Lin and Gong-Ru Lin*, "Origin of Pulse Shortening in Erbium-Doped Fiber Lasers Passively Mode-Locked by Different Kinds of Nano-Scale Carbon Materials", *Optical Materials Express*, Accepted, 2014. 2.616

2014 (SCI:18)

- ❖ ★ 303. Cheng-Ting Tsai, Min-Chi Cheng, Yu-Chieh Chi and Gong-Ru Lin*, "A Novel Colorless FPLD Packaged with To-can for 30-Gbit/s Pre-amplified 64-QAM-OFDM Transmission," *IEEE Journal of Selected Topics in Quantum Electronics*, Accepted, 2014. 4.078
- ❖ ★ 302. Yu-Chieh Chi and Gong-Ru Lin*, "40-Gbit/s pulsed RZ-OOK transmission using a Q-factor enhanced self-starting modulator loop", *IEEE Transactions on Microwave Theory and Techniques*, Accepted, 2014. 2.229
- ❖ ★ 301. Chih-Hsien Cheng, Wei-Lun Hsu, Chun-Jung Lin, and Gong-Ru Lin*, "Performance of Highly Transparent and Stable Zinc Oxide Co-doped Thin-Film by Aluminum and Ytterbium", *Journal of Display Technology*, Vol. 10, Issue 10, pp. 786-792, Oct. 2014. 1.663
- ❖ ★ 300. Yu-Chieh Chi and Gong-Ru Lin*, "Self optical pulsation based RZ-BPSK and reused RZ-OOK bi-directional OC-768 transmission", *Journal of Lightwave Technology*, Vol. 32, Issue 20, pp. 3728-3734, Oct. 2014. 2.555
- ❖ ★ 299. Kuang-Nan Cheng, Yu-Chieh Chi, Chih-Hsien Cheng, Yung-Hsiang Lin, Jui-Yung Lo, and Gong-Ru Lin*, "Effect of Beam Expansion Loss in Carbon Nanotube Doped PVA Film on the Passively Mode-Locked Erbium Doped Fiber Lasers with Different Feedback Ratios", *Laser Physics*, Vol. 24, Issue 10, 105115, 2014. 2.545
- ❖ ★ 298. Sheng-Fong Lin, Huai-Yung Wang, Yu-Chuan Su, Yu-Chieh Chi, and Gong-Ru Lin*, "Multi-order bunched soliton pulses generation by nonlinear polarization rotation mode-locking Erbium-doped fiber lasers with weak or strong polarization-dependent loss," *Laser Physics*, Vol. 24, Issue 10, 105113, 2014. 2.545
- ❖ ★ 297. Min-Chi Cheng, Cheng-Ting Tsai, Yu-Chieh Chi, and Gong-Ru Lin*, "Direct QAM-OFDM Encoding of a L-band Master-to-Slave Injection-Locked WRC-FPLD Pair for 28×20 Gb/s DWDM-PON Transmission," *Journal of Lightwave Technology*, Vol. 32, Issue 17, pp. 2981-2988, 2014. 2.555
- ❖ ★ 296. Sheng-Fong Lin and Gong-Ru Lin*, "Dual-band wavelength tunable nonlinear polarization rotation 3.587

	mode-locked Erbium-doped fiber lasers induced by birefringence variation and gain curvature alteration” <i>Optics Express</i> , Vol. 22, Issue 18, pp. 22121-22132, Sep. 2014.	
❖ ★ 295.	Yu-Chuan Su, Yu-Chieh Chi, Hsiang-Yu Chen, and <u>Gong-Ru Lin*</u> , “Using Self-Feedback Controlled Colorless Fabry-Perot Laser Diode for Remote Control Free Single-Mode DWDM-PON Transmission,” <i>IEEE Journal of Quantum Electronics</i> , Vol. 50, Issue 8, pp. 658-668, Aug. 2014.	1.830
❖ ★ 294.	Yung-Hsiang Lin, Chun-Yu Yang, Sheng-Feng Lin, Wei-Hsuan Tseng, Qiaoliang Bao, Chih-I Wu, and <u>Gong-Ru Lin*</u> , “Soliton Compression of the Erbium-doped fiber laser passively mode-locked by nano-scale p-type Bi ₂ Te ₃ topological insulator particles,” <i>Laser Physics Letters</i> , Vol. 11, pp. 055107, 2014.	7.714
❖ ★ 293.	Yu-Chieh Chi, Huai-Yung Wang, Chih-Hsien Cheng, and <u>Gong-Ru Lin*</u> , “40 Gbit/s Pulsed RZ-BPSK Transmission with a 40-GHz Self-Pulsated DFB-LD-MZM Link”, <i>Journal of Optical Communications and Networking</i> , Vol. 50, Issue 8, pp. 658-668, Aug. 2014.	1.433
❖ ★ 292.	Chao-Kuei Lee, Yuan-Yao Lin, Sung-Hui Lin, Gong-Ru Lin, and Ci-Ling Pan “Chirped-pulse manipulated carrier dynamics in low-temperature GaAs,” <i>Applied Physics Letters</i> , Vol. 104, Issue 17, 172105, April 2014	3.794
❖ ★ 291.	Chung-Lun Wu, Sheng-Pin Su, and <u>Gong-Ru Lin*</u> , “All optical modulation based on Silicon quantum dot doped SiO _x :Si-QD waveguide,” <i>Laser & Photonics Reviews</i> , Vol. 8, Issue 5, pp. 766-776, Sep. 2014.	9.313
❖ ★ 290.	Chih-Hsien Cheng, Yung-Hsian Lin, Jung-Hung Chang, Chih-I Wu, and <u>Gong-Ru Lin*</u> , “Semi-transparent Si-rich Si _x C _{1-x} p-i-n photovoltaic solar cell grown by hydrogen-free PECVD” <i>RSC Advances</i> , Vol. 4, Issue 35, pp. 18397-18405, Feb. 2014.	2.562
❖ ★ 289.	Min-Chi Cheng, Yu-Chieh Chi, Yi-Cheng Li, Cheng-Ting Tsai and Gong-Ru Lin*, “Suppressing the relaxation oscillation noise of injection-locked WRC-FPLD for directly modulated OFDM transmission”, <i>Optics Express</i> , Vol. 22, Issue 13, pp. 15724-15736, Jun. 2014.	3.587
❖ ★ 288.	Jung-Jui Kang, Chao-Kuei Lee, Yung-Hsiang Lin, and <u>Gong-Ru Lin*</u> , "Chirp Evolution Algorithm of a Dark-Optical-Comb Injection Mode-Locked SOA Fiber Laser Pulses During Soliton Compression," <i>IEEE Journal of Selected Topics in Quantum electronics</i> , Vol. 20, Issue 5, 0900107, Sep.-Oct. 2014.	4.078
❖ ★ 287.	Hung-Yu Tai, Chih-Hsien Cheng and <u>Gong-Ru Lin*</u> , “Blue-Green Light Emission from Si and SiC quantum dots co-doped Si-rich SiC p-i-n Junction Diode,” <i>IEEE Journal of Selected Topics in Quantum Electronics on Semiconductor lasers</i> , Vol. 20, Issue 4, 8200507, Jul.-Aug. 2014.	4.078
❖ ★ 286.	Chung-Lun Wu, Sheng-Pin Su and <u>Gong-Ru Lin*</u> , “All-optical data inverter based on free-carrier absorption induced cross-gain modulation in Si quantum dot doped SiO _x waveguide,” <i>IEEE Journal of Selected Topics in Quantum Electronics on Semiconductor lasers</i> , Vol. 20, Issue 4, 820909, Jul.-Aug. 2014.	4.078
285.	紀裕傑*、林詩穎、李益丞、林恭如, “弱腔模法布里-珀羅雷射二極體端面反射率變化與改變注入鎖定光同調性質對其直調發射光傳輸品質的影響”, 光電工程季刊第一二四期·9-15 頁·2014 年 1 月	
2013 (SCI: 29)		
❖ ★ 284.	Chun-Yu Yang, Chung-Lun Wu, Yung-Hsiang Lin, Ling-Hsuan Tsai, Chi-Chieh Yu, Jung-Hung Chang, Chih-I Wu, Hung-Kuei Tsai, Din-Ping Tsai and <u>Gong-Ru Lin*</u> , “Fabricating Graphite Nano-Sheet Powders by Slow Electrochemical Exfoliation of Large-Scale Graphite Foil as a Mode-Locker for Fiber Lasers,” <i>Optical Materials Express</i> , Vol. 3, Issue 11, pp. 1893-1905, Nov. 2013.	2.616
❖ ★ 283.	Kung-Hsuan Lin, Sz-Chian Liou, Wei-Liang Chen, Chung-Lun Wu, <u>Gong-Ru Lin</u> , and Yu-Ming Chang, “Tunable and stable UV-NIR photoluminescence from annealed SiO _x with Si nanoparticles,” <i>Optics Express</i> , Vol. 21, Issue 20, pp. 23416-23424, Oct. 2013	3.546
❖ ★ 282.	Yung-Hsiang Lin, Jui-Yung Lo, Wei-Hsuan Tseng, Chih-I Wu, and <u>Gong-Ru Lin*</u> , "Self-amplitude and self-phase modulation of the charcoal mode-locked erbium-doped fiber lasers," <i>Optics Express</i> , Vol. 21, Issue 21, pp. 25184-25196, Oct. 2013	3.546
❖ ★ 281.	Jung-Jui Kang, Yung-Hsiang Lin, Chao-Kuei Lee, and <u>Gong-Ru Lin*</u> , "2nd-order fractional Talbot effect induced frequency-doubling optical pulse injection for 40-GHz rational-harmonic	2.545

	mode-locking of SOA fiber laser," <i>Laser Physics</i> , Vol. 23, Issue 9, 095106, Sep. 2013.	
❖ *	280. Chung-Lun Wu, and <u>Gong-Ru Lin*</u> , "Power Gain Modeling of Si Quantum Dots Embedded SiO _x Waveguide Amplifier with Inhomogeneous Broadened Spontaneous Emission", <i>IEEE Journal of Selected Topics in Quantum Electronics on Semiconductor lasers</i> , Vol. 19, Issue 5, pp. 3000109, Sep-Oct. 2013.	3.780
	279. Yu-Chieh Chi and <u>Gong-Ru Lin*</u> , "自耦振盪光脈衝載波建構無源 10 Gbit/s 歸零相移與開關鍵控雙向傳輸", 科儀新知, No. 192, pp. 4-10, Feb. 2013.	
❖ *	278. Shih-Ying Lin, Yu-Chuan Su, Yi-Cheng Li, Hai-Lin Wang, Gong-Cheng Lin, Shian-Ming Chen, and Gong-Ru Lin, "10-Gbit/s direct modulation of a TO-56-can packed 600-μm long laser diode with 2% front-facet reflectance," <i>Optics Express</i> , Vol. 21, Issue 21, pp. 25197- 25209, Oct. 2013.	3.587
❖ *	277. Yi-Cheng Li, Yu-Chieh Chi, and <u>Gong-Ru Lin*</u> , "Coherently wavelength injection-locking a 600-μm long cavity colorless laser diode for 16-QAM OFDM at 12 Gbit/s over 25-km SMF," <i>Optics Express</i> , Vol. 21, Issue 14, pp. 16722-16735, Jul. 2013.	3.587
❖ *	276. Yung-Hsiang Lin, Chun-Yu Yang, J.-H. Liou, C.-P. Yu, and <u>Gong-Ru Lin*</u> , "Using graphene nano-particle embedded in photonic crystal fiber for evanescent wave mode-locking of fiber laser," <i>Optics Express</i> , Vol. 21, Issue 14, pp. 16763-16776, Jul. 2013.	3.587
❖ *	275. Chih-Hsien Cheng and <u>Gong-Ru Lin*</u> , "Nano-crystalline silicon based bottom gate thin film transistor grown by LTPECVD with hydrogen-free He diluted SiH ₄ ", <i>Journal of Display Technology</i> , Vol. 9, Issue 7, pp. 536-544, Jul. 2013.	2.280
❖ *	274. I-Cheng Lu, Chia-Chien Wei*, Wen-Jr Jiang, Hsing-Yu Chen, Yu-Chieh Chi, Yi-Cheng Li, Dar-Zu Hsu, <u>Gong-Ru Lin</u> , and Jyehong Chen, "20-Gbps WDM-PON transmissions employing weak-resonant-cavity FPLD with OFDM and SC-FDE modulation," <i>Optics Express</i> , Vol. 21, Issue 7, pp. 8622-8629, Apr. 2013.	3.587
❖ *	273. Yi-Cheng Lee, Yu-Chieh Chi, Cheng-Ting Tsai, Yung-Hsiang Lin, and <u>Gong-Ru Lin*</u> , "Harmonic Mode-Locking of 10-GHz Directly Modulated Weak-Resonant-Cavity Fabry-Perot Laser Diode in Self-Feedback Fiber Ring" , <i>IEEE Journal of Selected Topics in Quantum Electronics on Semiconductor lasers</i> . Vol. 19, Issue 4, pp. 1100510, Jul-Aug 2013.	3.780
❖ *	272. Shih-Ying Lin, Yu-Chieh Chi, Hai-Lin Wang, Gong-Cheng Lin, Jy-Wang Liaw, and <u>Gong-Ru Lin*</u> , "Coherent Injection-Locking of Long-Cavity Colorless Laser Diodes with Low Front-Facet Reflectance for DWDM-PON Transmission", <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , Vol. 19, Issue 4, pp. 1501011, Jul-Aug 2013	3.780
❖ *	271. Chun-Ju Lin, Yu-Chieh Chi, and <u>Gong-Ru Lin*</u> , "The self-started 10-GHz harmonic mode-locking of a hybrid weak-resonant-cavity laser diode and fiber ring link," <i>Laser Physics Letters</i> , Vol. 10, Issue 6, pp. 065801, 2013.	9.970
❖ *	270. Chun-Ju Lin, Yu-Chieh Chi, and <u>Gong-Ru Lin*</u> , "Self-starting and overlocking a harmonically mode-locking WRC-FPLD with a dual-loop feedback controller for 10 Gbs ⁻¹ pulse-data transmission," <i>Laser Physics Letters</i> , Vol. 10, Issue 6, pp. 065001, 2013.	9.970
❖ *	269. Kaung-Jay Peng, Chung-Lun Wu, Yung-Hsiang Lin, Yen-Ju Liu, Din Ping Tsai, Yi-Hao Pai and <u>Gong-Ru Lin*</u> "Hydrogen-free PECVD growth of few-layer graphene on an ultra-thin nickel film at the threshold dissolution temperature", <i>J. Mater. Chem. C</i> . Vol. 1, Issue 24, pp. 3852-3870, May 2013.	5.970
❖ *	268. Yung-Hsiang Lin, Yu-Chieh Chi, and <u>Gong-Ru Lin*</u> , "Nanoscale charcoal powder induced saturable absorption and mode-locking of a low-gain erbium-doped fiber-ring laser", <i>Laser Physics Letters</i> , Vol.10, pp. 055105, Mar. 2013.	9.970
❖ *	267. Yu-Chieh Chi and <u>Gong-Ru Lin*</u> , "Optical self-injection mode-locking of semiconductor optical amplifier fiber ring with electro-absorption modulation—fundamentals and applications," <i>Laser Physics</i> , Vol. 23, Issue 4, pp. 045110, Apr. 2013.	3.605
❖ *	266. Kuang-Nan Cheng, Yung-Hsiang Lin, and <u>Gong-Ru Lin*</u> , "Single- and double-wall CNT based saturable absorbers for passively mode-locking erbium-doped fiber laser", <i>Laser Physics</i> , Vol. 23, No. 4, pp. 045105, Apr. 2013.	3.605
❖ *	265. Yung-Hsiang Lin and <u>Gong-Ru Lin*</u> , "Kelly sideband variation and self four-wave-mixing in femtosecond fiber soliton laser mode-locked by multiple exfoliated graphite nano-particles", <i>Laser Physics Letters</i> , Vol. 10, No. 4, pp. 045109, Apr. 2013.	9.970

❖ *	264.	Chm-Ju Lin and <u>Gong-Ru Lin</u> , “Frequency chirp and mode partition induced mutual constraint on the side-band phase noise of a mode-locking WRC-FPLD fiber ring self-started with a lengthened feedback loop,” <i>Laser Physics</i> , Vol. 23, Issue 4, pp. 045103, Apr. 2013	<u>2.545</u>
❖ *	263.	<u>Gong-Ru Lin*</u> , Yu-Chieh Chi, and Yi-Cheng Li “Using a L-Band Weak-Resonant-Cavity FPLD for Subcarrier Amplitude Pre-Leveled 16-QAM-OFDM Transmission at 20 Gbit/s”, <i>Journal of Lightwave Technology</i> , Vol. 31, Issue 7, pp. 1079-1087 Apr. 2013.	<u>2.784</u>
❖ *	262.	Hou-Ren Chen, Kuei-Huei Lin, Chih-Ya Tsai, Hsiao-Hua Wu, Chih-Hsuan Wu, Chieh-Han Chen, Yu-Chieh Chi, <u>Gong-Ru Lin</u> , and Wen-Feng Hsieh, “12 GHz passive harmonic mode-locking in a 1.06 μm semiconductor optical amplifier-based fiber laser with figure-eight cavity configuration,” <i>Optics Letters</i> , Vol. 38, Issue 6, pp. 845-847, Mar. 2013	<u>3.385</u>
❖ *	261.	Bo-Han Lai, Chih-Hsien Cheng, and <u>Gong-Ru Lin*</u> , “Electroluminescent wavelength shift of Si-rich SiO_x based blue and green MOSLEDs induced by O/Si composition Si-QD size variations”, <i>Optical Materials Express</i> , Vol. 3, No. 2, pp. 166-175, Feb. 2013.	<u>2.616</u>
❖ *	260.	Hung-Yu Tai, Yung-Hsiang Lin, and <u>Gong-Ru Lin*</u> , “Wavelength Shifted Yellow Electroluminescence of Si Quantum-Dot Embedded 20-Pair $\text{SiN}_x/\text{SiO}_x$ Superlattice by Ostwald Ripening Effect”, <i>IEEE Photonics Journal</i> , Vol. 5, No. 1, pp. 6600110, Feb. 2013.	<u>2.320</u>
❖ *	259.	Yu-Chieh Chi and <u>Gong-Ru Lin*</u> , “A self-started DFBLD/EAM pulsed carrier for down-stream RZ-BPSK and up-stream reused RZ-OOK transmission at 10Gbit/s”, <i>Journal of Lightwave Technology</i> , Vol. 31, Issue. 2, pp. 187-194, Feb. 2013.	<u>2.784</u>
❖ *	258.	Chih-Hsien Cheng, Yu-Chung Lien, Chung-Lun Wu, and <u>Gong-Ru Lin*</u> , “Multicolor electroluminescent Si quantum dots embedded in SiO_x thin film MOSLED with 2.4% external quantum efficiency”, <i>Optics Express</i> , Vol. 21, No. 1, pp. 391-403, 2013.	<u>3.587</u>
❖ *	257.	Yu-Chieh Chi, Yi-Cheng Li, and <u>Gong-Ru Lin*</u> , “Specific Jacket SMA-Connected TO-Can Package FPLD Transmitter With Direct Modulation Bandwidth Beyond 6 GHz for 256-QAM Single or Multisubcarrier OOFDM up to 15 Gb/s”, <i>Journal of Lightwave Technology</i> , Vol. 31, Issue. 1, pp. 28–35, Jan 2013.	<u>2.784</u>
❖ *	256.	Hung-Yu Tai, Chiao-Ti Lee, Lin-Hsuan Tsai, Yung-Hsiang Lin, Yi-Hao Pai, Chih-I Wu, <u>Gong-Ru Lin*</u> , “SiC and Si Quantum Dots Co-Precipitated Si-Rich SiC Film with n-and p-Type Dopants Grown by Hydrogen-Free PECVD,” <i>ECS Journal of Solid State Science and Technology</i> , Vol. 2, Issue 9, pp. N159-N164, 2013.	
2012 (SCI: 21)			
*	255	Chung-Lun Wu, and <u>Gong-Ru Lin*</u> , “Inhomogeneous linewidth broadening and radiative lifetime dispersion of size dependent direct bandgap radiation in Si quantum dot,” <i>AIP Advances</i> , Vol. 2, Issue 4, 042162, Nov. 2012.	<u>1.350</u>
*	254	Chiao-Ti Lee, Ling-Hsuan Tsai, and Yung-Hsiang Lin, and <u>Gong-Ru Lin*</u> , “A chemical vapor deposited silicon-rich silicon carbide P-N junction based thin-film photovoltaic solar cell”, <i>ECS Journal of Solid State Science and Technology</i> , Vol. 1, No. 6, pp. Q144-Q148, Nov. 2012.	
❖ *	253.	P.-L. Huang, H.-H. Kuo, R.-X. Dong, B.-Z. Hsieh, S.-H. Huang, S.-F. Hong, P.-T. Shih, C.-Y. Yeh, <u>G.-R. Lin</u> , J.-J. Lin, W.-H. Cheng, “Performance of Graphene Mediated Saturable Absorber on Stable Mode-Locked Fiber Lasers Employing Different Nano-Dispersants”, <i>Journal of Lightwave Technology</i> , Vol. 30, No. 21, pp. 3413-3419, Nov. 2012.	<u>2.784</u>
❖ *	252.	Chung-Lun Wu, Yung-Hsiang Lin and <u>Gong-Ru Lin*</u> , “Narrow-linewidth and wavelength-tunable red-light emission from Si quantum dots embedded oxynitride distributed Bragg reflector”, <i>IEEE Journal of Selected Topics in Quantum Electronics</i> (special issue on Semiconductor lasers), Vol. 18, Issue 6, pp. 1643-1649, Oct. 2012.	<u>3.780</u>
❖ *	251.	Yu-Chieh Chi, Chun-Ju Lin, Shih-Ying Lin, and <u>Gong-Ru Lin*</u> , “The reuse of down-stream carrier data-erased by self-feedback SOA for bi-directional DWDM-PON transmission”, <i>Journal of Lightwave Technology</i> , Vol. 30, No. 19, pp. 3096-3102, Oct. 2012.	<u>2.784</u>
❖ *	250.	Chih-Hsien Cheng, Chun-Lun Wu, Chun-Chieh Chen, Ling-Hsuan Tsai, Yung-Hsiang Lin, and <u>Gong-Ru Lin*</u> , “Si-Rich $\text{Si}_x\text{C}_{1-x}$ Light-Emitting Diodes With Buried Si Quantum Dots”, <i>IEEE Photonics Journal</i> , Vol. 4, Issue 5, pp. 1762-1775, Oct. 2012.	<u>2.320</u>
❖ *	249.	Tzu-Chieh Lo, Ling-Hsuan Tsai, Chih-Hsien Cheng, Po-Sheng Wang, Yi-Hao Pai, Chih-I Wu, and <u>Gong-Ru Lin*</u> , “Self-aggregated Si nanocrystals in amorphous Si-rich SiC”, <i>Journal of Non-Crystalline Solids</i> , Vol. 358, Issue 17, pp. 2126-2129, Sep. 2012.	<u>1.537</u>

❖ *	248.	Yu-Chieh Chi, Yi-Cheng Li, Huai-Yung Wang, Peng-Chun Peng, Hai-Han Lu, and <u>Gong-Ru Lin*</u> , “Optical 16-QAM-52-OFDM transmission at 4 Gbit/s by directly modulating a coherently injection-locked colorless laser diode,” <i>Optics Express</i> , Vol. 20, Issue 18, pp. 20071-20077, Aug. 2012.	<u>3.587</u>
❖ *	247.	Kuang-Nan Cheng, Yung-Hsiang Lin, Shinji Yamashita, and <u>Gong-Ru Lin*</u> , “Harmonic order dependent pulsewidth shortening of a passively mode-locked fiber laser with carbon nanotube saturable absorber,” <i>IEEE Photonic Journal</i> , Vol. 4, pp.1542-1552, Oct. 2012.	<u>2.320</u>
❖ *	246.	<u>Gong-Ru Lin*</u> , Chung-Hsiang Chang, Chih-Hsien Cheng, Chi-I Wu, and Po-Sheng Wang, “Transient UV and visible luminescent dynamics of Si-rich SiO _x metal-oxide-semiconductor light-emitting diodes,” <i>IEEE Photonics Journal</i> , Vol. 4, Issue 5, pp. 1351-1364, Oct. 2012.	<u>2.320</u>
❖ *	245.	Peng-Chun Peng, Huai-Yung Wang, Ruei-Long Lan, Hai-Han Lu, <u>Gong-Ru Lin</u> , G. Lin, and Jim-Yong Chi, “Wavelength switching based on quantum-dot vertical-cavity surface-emitting laser,” <i>Laser Physics</i> , Vol. 22, Issue 9, pp. 1373-1377, Sep. 2012.	<u>3.605</u>
❖ *	244.	<u>Gong-Ru Lin*</u> , Yu-Chieh Chi, Yu-Sheng Liao, Hao-Chung Kuo, Hai-Lin Wang, and Gong-Cheng Lin “A pulsed weak-resonant-cavity laser diode with transient wavelength scanning and tracking for injection-locked RZ transmission,” <i>Optics Express</i> , Vol. 20, Issue 13, pp. 13622-13635, Jun. 2012.	<u>3.587</u>
*	243.	Yung-Hsiang Lin and <u>Gong-Ru Lin*</u> , “Medium-gain erbium doped fiber amplifier ring laser passively mode-locked by graphite nano-powder adhered thin PVA film,” <i>Proceeding of SPIE</i> , Vol. 8433, pp. 84330J (2012).	
❖ *	242.	Chih-Kuo Tseng, Ming-Chang M. Lee, Hau-Wei Hung, Jiun-Ru Huang, Kun-Yu Lee, Jia-Min Shieh <u>Gong-Ru Lin</u> , “Silicon-nanocrystal resonant-cavity light emitting devices for color tailoring,” <i>Journal of Applied Physics</i> , Vol. 111, Issue. 7, pp. 074512, Apr 2012.	<u>2.168</u>
❖ *	241.	Yu-Chieh Chi and <u>Gong-Ru Lin*</u> , “Transmission performance of an electro-absorption modulator based self-started optical pulsator and synthesizer-free RZ clock and data generator,” <i>IEEE Journal of Selected Topics in Quantum Electronics</i> (special issue on Nonlinear-Optical Signal Processing), Vol. 18, No. 2, pp. 567-576, Mar.-Apr. 2012.	<u>3.780</u>
❖ *	240.	<u>Gong-Ru Lin*</u> , Yung-Hsiang Lin, Fan-Shuen Meng, “Haze and polarization scrambling of nonlinearly scattered light from anti-glare Si nano-rod surface,” <i>IEEE Photonics Journal</i> , Vol. 4, Issue. 1, pp.163-173, Feb. 2012.	<u>2.320</u>
❖ *	239.	Pi-Ling Huang, Shau-Ching Lin, Chao-Yung Yeh, Hsin-Hui Kuo, Shr-Hau Huang, <u>Gong-Ru Lin</u> , Lain-Jong Li, Ching-Yuan Su, and Wood-Hi Cheng, “Stable mode-locked fiber laser based on CVD fabricated graphene saturable absorber,” <i>Optics Express</i> , Vol. 20, Issue 3, pp. 2460-2465, Jan. 2012.	<u>3.587</u>
❖ *	238.	Yung-Hsiang Lin and <u>Gong-Ru Lin</u> , “Free-standing nano-scale graphite saturable absorber for passively mode-locked erbium doped fiber ring laser,” <i>Laser Physics Letters</i> , Vol. 9, No. 5, pp. 398–404 (2012).	<u>9.970</u>
❖ *	237.	Yi-Hao Pai, Chun-Wei Tseng, and Gong-Ru Lin, “Size-dependent surface properties of low-reflectivity nanoporous alumina thin-film on glass substrate” <i>Journal of the Electrochemical Society</i> , Vol. 159, Issue 5, pp. E99-E102, Feb. 2012.	<u>2.590</u>
❖ *	236.	<u>Gong-Ru Lin*</u> , Fan-Shuen Meng, Yi-Hao Pai, and Yung-Hsiang Lin, “Enhanced conversion efficiency and surface hydrophobicity of nano-roughened teflon-like film coated poly-crystalline Si solar cell,” <i>Physical Chemistry Chemical Physics</i> , Vol. 14, pp.3968-3973, Jan 2012.	<u>3.573</u>
❖ *	235.	<u>Gong-Ru Lin*</u> , Tzu-Chieh Lo, Ling-Hsuan Tsai, Yi-Hao Pai, Chih-Hsien Cheng, Chih-I Wu, and Po-Sheng Wang, “Finite silicon atom diffusion induced size limitation on self-assembled silicon quantum dots in silicon-rich silicon carbide”, <i>Journal of the Electrochemical Society</i> , Vol. 159, Issue 2, pp. K35-K41, Dec. 2011.	<u>2.241</u>
2011 (SCI: 23)			
❖ *	234.	<u>Gong-Ru Lin*</u> and Y.-C. Lin, “Directly exfoliated and imprinted graphite nano-particle saturable absorber for passive mode-locking erbium-doped fiber laser,” <i>Laser Physics Letters</i> , Vol. 8, No. 12, pp. 880-886, Dec. 2011. (<i>Essential Science Indicators, ESI Selected Highly Cited Paper 2012</i>)	<u>6.010</u>
❖ *	233.	Cheng-Dao Lin, Chih-Hsien Cheng, Yung-Hsiang Lin, Chung-Lun Wu, Yi-Hao-Pai, and <u>Gong-Ru Lin*</u> , “Comparing retention and recombination of electrically injected carriers in Si quantum dots embedded in Si-rich SiN _x films”, <i>Applied Physics Letters</i> , Vol. 99, No. 24, 243501, Dec. 2011.	<u>3.841</u>
❖ *	232.	Kuen-Cherng Lin, <u>Gong-Ru Lin</u> , and Yu-Chan Lin, “Simple two-stage pulse compression for a SOA-based fiber ring,” <i>Microwave and Optical Technology Letters</i> , Vol. 53, No. 10, pp. 2330-2332,	<u>0.656</u>

	Oct 2011	
❖ ★ 231.	Yu-Chieh Chi, and <u>Gong-Ru Lin*</u> , “Distinguished RZ-OOK performances between DFBLD pulsed carriers self-started by gain switching and nonlinear absorption modulation,” <i>IEEE Journal of Selected Topics in Quantum Electronics</i> (special issue on Semiconductor Lasers), Vol. 17, Issue 5, pp. 1146-1152, Sept.-Oct. 2011.	3.466
❖ ★ 230.	Chung-Lun Wu, and <u>Gong-Ru Lin*</u> , “Gain and emission cross section analysis of wavelength-tunable Si-nc incorporated Si-rich SiO _x waveguide amplifier,” <i>IEEE Journal of Quantum Electronics</i> , Vol. 47, Issue 9, pp. 1230-1237, Sept. 2011.	2.480
❖ ★ 229.	Yi-Hao Pai, and <u>Gong-Ru Lin*</u> , “Crystalline-phase-dependent photoluminescence and photoconductivity of roughened ZnO nanostructure grown by self-electrochemical transformation,” <i>Journal of the Electrochemical Society</i> , Vol. 158, No. 8, pp. E88-E92, August 2011	2.427
❖ ★ 228.	Yi-Hao Pai, and <u>Gong-Ru Lin*</u> , “Nano-roughened teflon-like film coated polyethylene terephthalate substrate with trifluoromethane plasma enhanced hydrophobicity and transparency,” <i>Journal of the Electrochemical Society</i> , Vol. 158, No. 8, pp. G173-G177, August 2011	2.427
❖ ★ 227.	Yu-Chieh Chi, Peng-Chun Peng, and <u>Gong-Ru Lin*</u> , “Clock-free RZ-BPSK data generation using self-starting optoelectronic oscillator”, <i>Journal of Lightwave Technology</i> , Vol. 29, Issue 11, pp. 1702-1707, Jun 2011.	2.259
❖ ★ 226.	<u>Gong-Ru Lin*</u> , Yi-Hung Lin, Chun-Ju Lin, Yu-Chieh Chi, and Gong-Cheng Lin, “Reusing a data-erased ASE carrier in a weak-resonant-cavity laser diode for noise-suppressed error-free transmission,” <i>IEEE Journal of Quantum Electronics</i> , Vol. 47, Issue 5, pp. 676-685, May 2011.	2.480
❖ ★ 225.	Bo-Han Lai, Chih-Hsien Cheng, and <u>Gong-Ru Lin*</u> , “Multi-color ITO/SiO _x /p-Si/Al light emitting diodes with improved emission efficiency by small Si quantum dots,” <i>IEEE Journal of Quantum Electronics</i> , Vol. 47, No. 5, pp. 698-704, May 2011.	2.480
❖ ★ 224.	Fan-Shuen Meng, Yung-Hsiang Lin, and <u>Gong-Ru Lin*</u> , “Omnidirectional reflectance and vanishing Brewster angle of disordered semiconductor nano-pillar surface with gradually changed refractive-index,” <i>Journal of Applied Physics</i> , Vol. 109, 083523, Apr 2011.	2.072
❖ ★ 223.	Cheng-Chang Chen, Yung-Hsaing Lin, M. H. Shih, <u>Gong-Ru Lin</u> , and Hao-Chung Kao, “Light enhancement of silicon-nanocrystal-embedded SiO _x film on silicon-on-insulator substrate,” <i>Japanese Journal of Applied Physics</i> , Vol. 50, Issue 4, pp. 04DJ09-04DJ09-3, Apr 2011.	1.024
❖ ★ 222.	Chia-Chi Lin, Yu-Chieh Chi, Hao-Chung Kuo, Peng-Chun Peng, Connie Chang-Hasnain, and <u>Gong-Ru Lin*</u> , “Beyond-bandwidth electrical pulse modulation of a TO-can packaged VCSEL for 10 Gbit/s injection-locked NRZ-to-RZ transmission,” <i>Journal of Lightwave Technology</i> , Vol. 29, Issue 6, pp. 830-841, March 2011.	2.259
❖ ★ 221.	Yung-Hsiang Lin, Chung-Lun Wu, Yi-Hao Pai, and <u>Gong-Ru Lin*</u> , “A 533-nm self-luminescent Si-rich SiN _x /SiO _x distributed Bragg reflector,” <i>Optics Express</i> , Vol. 19, Issue 7, pp. 6563-6570, Mar 2011.	3.753
❖ ★ 220.	Yi-Hung Lin, Chun-Ju Lin, Gong-Cheng Lin, and <u>Gong-Ru Lin*</u> , “Saturated signal-to-noise ratio of up-stream WRC-FPLD transmitter injection-locked by down-stream data-erased ASE carrier,” <i>Optics Express</i> , Vol. 19, Issue 5, pp. 4067–4075, Feb. 2011.	3.753
❖ ★ 219.	Guo-Hsuan Peng, Jung-Jui Kang, Yu-Chan Lin, Yu-Chieh Chi, Chao-Kuei Lee, and <u>Gong-Ru Lin*</u> , “Chirp-compensated multichannel hybrid DWDM/TDM pulsed carrier from optically injection-mode-locked weak-resonant-cavity laser diode fiber ring,” <i>IEEE Journal of Quantum Electronics</i> , Vol. 47, No. 2, pp. 182-189, February 2011.	2.480
❖ ★ 218.	Jin-Chen Chiu, Chia-Ming Chang, Bi-Zen Hsieh, Shu-Ching Lin, Chao-Yung Yeh, <u>Gong-Ru Lin</u> , Chao-Kuei Lee, Jiang-Jen Lin, and Wood-Hi Cheng, “Pulse shortening mode-locked fiber laser by thickness and concentration product of carbon nanotube based saturable absorber,” <i>Optics Express</i> , Vol. 19, Issue 5, pp. 4036–4041, Feb. 2011.	3.753
❖ ★ 217.	Yi-Hao Pai and <u>Gong-Ru Lin*</u> , “Spontaneous electrochemical synthesis of morphologically controlled 1D ZnO structure with 1D ZnO composition ratio dependent photoluminescences”, <i>Journal of the Electrochemical Society</i> , Vol. 158(3), pp. E27-E31, Jan 2011.	2.427
❖ ★ 216.	<u>Gong-Ru Lin*</u> , Yu-Sheng Liao, and Hao-Chung Kuo, “In situ and self-restorable injection-jocking monitor by integrated photodiode for FPLD WDM transmitter”, <i>IEEE Journal of Quantum Electronics</i> , Vol. 47, No. 1, pp. 76-83, Jan 2011.	2.480
❖ ★ 215.	<u>Gong-Ru Lin*</u> , Yung-Hsiang Lin, Yi-Hao Pai, and Fan-Shuen Meng, “Si nanorod length dependent	3.753

	surface Raman scattering linewidth broadening and peak shift,” <i>Optics Express</i> , Vol. 19, Issue 2, pp. 597-605, Jan 2011.	
❖ ★ 214.	Yi-Hao Pai, Yu-Chan Lin, Jai-Lin Tsai, and <u>Gong-Ru Lin*</u> , “Nonlinear dependence between the surface reflectance and the duty-cycle of semiconductor nanorod array”, <i>Optics Express</i> , Vol. 19, Issue 3, pp. 1680-1690, Jan 2011.	<u>3.753</u>
❖ ★ 213.	Yi-Hao Pai, and <u>Gong-Ru Lin*</u> , “Spatially confined synthesized SiO _x nano-rod with size-controlled Si quantum dots in nano-porous anodic aluminum oxide membrane”, <i>Optics Express</i> , Vol. 19(2) pp. 896-905, Jan 2011.	<u>3.753</u>
❖ ★ 212.	Gong-Ru Lin, Fan-Shuen Meng, and Yung-Hsiang Lin, “Second-order Scattering Induced Reflection Divergence and Nonlinear Depolarization on Randomly Corrugated Semiconductor Nano-Pillars,” <i>Progress in Electromagnetics Research-PIER</i> , Vol. 117, pp. 67-81, May 2011.	<u>5.298</u>
2010 (SCI: 22)		
❖ ★ 211.	Ming-Chang Lee, Wei-Chao Chiu, Tse-Ming Yang, Chin-Hung Chen, Cheng-Yen Lu, and <u>Gong-Ru Lin*</u> , “Fabrication of Low-Loss Silicon Photonic Wires by Self-Profile Transformation and Applications in 3-D Photonic Integration and Nonlinear Optics,” <i>IEEE Journal of Quantum Electronics</i> , Vol. 46, No. 5, pp. 650-657, May 2010.	<u>2.480</u>
❖ ★ 210.	Fang-Ming Wu, Peng-Chun Peng, Jyehong Chen, Chun-Ting Lin, <u>Gong-Ru Lin</u> , and Sien Chi, “Electrically and Continuously Tunable Optical Delay Line Based on a Semiconductor Laser,” <i>Japanese Journal of Applied Physics</i> , Vol.49, Pt. 1, Issue 7, pp. 0741021-0741023, July 2010.	<u>1.024</u>
❖ ★ 209.	Yu-An Dai, Hung-Chin Chang, Kun-Yu Lai, Chin-An Lin, Ren-Jei Chung, <u>Gong-Ru Lin</u> , and Jr-Hau He*, “Subwavelength Si nanowire arrays for self-cleaning antireflection coatings,” <i>Journal of Materials Chemistry</i> , Vol. 20, Issue 48, pp. 10924-10930, September 2010.	<u>5.101</u>
❖ ★ 208.	<u>Gong-Ru Lin*</u> , Yu-Sheng Liao, Yu-Chieh Chi, Hao-Chung Kuo, Gong-Cheng Lin, Hai-Lin Wang, and Yung-Jui Chen, “Long-cavity Fabry-Perot Laser Amplifier Transmitter with Enhanced Injection-locking Bandwidth for WDM-PON Application”, <i>IEEE/OSA Journal of Lightwave Technology</i> , Vol. 28, No. 20, pp. 2925-2932, October 2010.	<u>2.259</u>
❖ ★ 207.	<u>Gong-Ru Lin*</u> , Yi-Hao Pai, Cheng-Tao Lin, and Chun-Chieh Chen, “Comparison on the Electroluminescence of Si-rich SiN _x and SiO _x based light-emitting diodes”, <i>Applied Physics Letters</i> , Vol. 96, Issue 26, 263514, Jun 2010.	<u>3.841</u>
❖ ★ 206.	Yu-Chieh Chi and <u>Gong-Ru Lin*</u> , “A Self-started Laser Diode Pulsation Based Synthesizer-free Optical Return-to-zero On-off-keying Data Generator,” <i>IEEE Transactions on Microwave Theory and Techniques</i> , Vol. 58, No. 8, pp. 2292-2298, August 2010.	<u>2.025</u>
❖ ★ 205.	Jin-Chen Chiu, Yi-Fen Lan, Chia-Ming Chang, Xi-Zong Chen, Chao-Yung Yeh, Chao-Kuei Lee, <u>Gong-Ru Lin</u> , Jiang-Jen Lin, and Wood-Hi Cheng*, “Concentration effect of carbon nanotube based saturable absorber on stabilizing and shortening mode-locked pulse”, <i>Optics Express</i> , Vol. 18, No. 4, pp. 3592-3600, February 2010.	<u>3.753</u>
❖ ★ 204.	<u>Gong-Ru Lin*</u> , Tzu-Kang Cheng, Yi-Hung Lin, Gong-Cheng Lin, and Hai-Lin Wang, “A Weak-Resonant-Cavity Fabry-Perot Laser Diode with Injection Locking Mode Number Dependent Transmission and Noise Performances”, <i>IEEE/OSA Journal of Lightwave Technology</i> , Vol. 28, No. 9, pp. 1349-1355, May 2010.	<u>2.259</u>
❖ ★ 203.	<u>Gong-Ru Lin*</u> , Cheng-Wei Lian, Chung-Lun Wu, and Yung-Hsiang Lin, “Gain analysis of optically-pumped Si nanocrystal waveguide amplifiers on silicon substrate”, <i>Optics Express</i> , Vol. 18, No. 9, pp. 9213-9219, April 2010.	<u>3.753</u>
❖ ★ 202.	<u>Gong-Ru Lin*</u> , Jung-Jui Kang, and Chao-Kuei Lee, “High-order rational harmonic mode-locking and pulse-amplitude equalization of SOAFL via reshaped gain-switching FPLD pulse injection”, <i>Optics Express</i> , Vol. 18, No. 9, pp. 9570-9579, April 2010.	<u>3.753</u>
❖ ★ 201.	<u>Gong-Ru Lin*</u> , Yu-Chan Lin, Kuen-Cherng Lin, Wei-Yu Lee, and Chung-Lun Wu, “50 fs soliton compression of optical clock pulse recovered from NRZ data injected SOAFL”, <i>Optics Express</i> , Vol. 18, No. 9, pp. 9525-9530, April 2010.	<u>3.753</u>
❖ ★ 200.	<u>Gong-Ru Lin*</u> , Yu-Chan Lin, Kuen-Cherng Lin, and Guo-Hsuan Peng, “Electro-Hole Plasma-Induced Spectral Blueshift of Optical-Data Injection Mode-Locked Semiconductor Optical Amplifier Fiber Laser”, <i>IEEE/OSA Journal of Lightwave Technology</i> , Vol. 28, No. 3, pp. 246-253, February 2010.	<u>2.259</u>
❖ ★ 199.	Bo-Han Lai, Chih-Hsien Cheng, Yi-Hao Pai, and <u>Gong-Ru Lin*</u> , “Plasma power controlled	<u>3.753</u>

	deposition of SiO _x with manipulated Si Quantum Dot size for photoluminescent wavelength tailoring”, <i>Optics Express</i> , Vol. 18, No. 5, pp. 4448-4456, March 2010.	
❖ ★ 198.	Gong-Ru Lin*, Yu-Chung Lien, and Yi-Hao Pai, “Size-Dependent Photoluminescence of Self-Trapped Excitons and Charge Retention of Si Nanocrystals in SiO _x Films”, <i>Journal of the Electrochemical Society</i> , Vol. 157, No. 3, pp. H256-H259, February 2010.	2.427
❖ ★ 197.	Yi-Hao Pai, and Gong-Ru Lin*, “In Situ Synthesis of Scalable Metallic Nanodots in Electron Microscope”, <i>Journal of the Electrochemical Society</i> , Vol. 22, Issue 2, pp. E13-E18, January 2010.	2.427
❖ ★ 196.	Yi Hung Lin, Gong-Cheng Lin, Hai-Lin Wang, Yu-Chieh Chi, and Gong-Ru Lin, “Compromised extinction and signal-to-noise ratios of weak-resonant-cavity laser diode transmitter injected by channelized and amplitude squeezed spontaneous-emission”, <i>Optics Express</i> , Vol. 18, No. 5, pp. 4457-4468, March 2010.	3.753
❖ ★ 195.	Peng-Chun Peng*, Ruei-Long Lan, Fang-Ming Wu, Gray Lin, Chun-Ting Lin, Jason (Jyehong) Chen, Gong-Ru Lin, Sien Chi, Hao-Chung Kuo, and Jim Y. Chi, “Polarization Characteristics of Quantum-Dot Vertical-Cavity Surface-Emitting Laser with Light Injection,” <i>IEEE Photonics Technology Letters</i> , Vol. 22, Issue 3, pp. 179-181, February 2009.	1.989
❖ ★ 194.	Chung-Hsiang Chang, Yi-Hao Pai, Jr-Hau He, Gong-Ru Lin*, “Wavelength-Tunable Blue Photoluminescence of <2-nm Si Nanocrystal Synthesized by Ultra-Low-Fluent PECVD”, <i>Acta Materialia</i> , Vol. 58, No. 4, pp. 1270-1275, January 2010.	3.791
❖ ★ 193.	Gong-Ru Lin*, Chung-Hsiang Chang, and Yi-Hao Pai, “Nearly Gaussian Dependence between Near-infrared Photoluminescence and O/Si Composition Ratio of Si-rich SiO _x Film with Buried Si Nanocrystals”, <i>Journal of Nanoscience and Nanotechnology</i> , Vol. 10, No. 3, pp. 1663-1667, March 2010.	1.352
❖ ★ 192.	Yu-Chung Lien, Yi-Hao Pai, and Gong-Ru Lin*, “Si Nano-Dots and Nano-Pyramids Dependent Light Emission and Charge Accumulation in ITO/SiO _x /p-Si MOS Diode”, <i>IEEE Journal of Quantum Electronics</i> , Vol. 46, No. 1, pp. 121-127, January 2010.	2.480
❖ ★ 191.	Chih-Ming Lee, Yi-Hao Pai, Gong-Ru Lin, and Fuh-Sheng Shieu*, “Teflon-Coated Carbon Fiber Core/Shell Structure Based Hydrophobic Gas-Diffusion Electrode for Proton Exchange Membrane Fuel Cells”, <i>Journal of the Electrochemical Society</i> , Vol. 157, No. 2 pp. B256-B259, January 2010.	2.427
❖ ★ 190.	Chih-Ming Lee, Yi-Hao Pai, Tzu-Piao Tang, Chih-Cheng Kao, Gong-Ru Lin, and Fuh-Sheng Shieu, “Enhancement of Blue-Green Photoluminescence in B ₂ O ₃ Fritted ZrO ₂ :Ce ³⁺ Phosphor,” <i>Materials Chemistry and Physics</i> , Vol. 119, No. 1-2, pp. 15-18, January 2010.	2.356
2009 (SCI: 20)		
❖ ★ 189.	Gong-Ru Lin*, Ci-Ling Pan, and Kun-Chieh Yu, “Optimizing the Extinction Ratio and Error Bit Penalty of the On-Off-Keying Pulse Data With Gain-Constrictive SOA”, <i>IEEE Journal of Quantum Electronics</i> , Vol. 45, No. 3, pp. 264-272, March 2009.	2.480
❖ ★ 188.	Gong-Ru Lin*, Fan-Shuen Meng, Yi-Hao Pai, Shih-Hsin Hsu, “Manipulative Depolarization and Reflectance Spectra of Morphologically Controlled Nano-pillars and Nano-rods”, <i>Optics Express</i> , Vol. 17, No. 23, pp.20824-20832, November 2009.	3.880
❖ ★ 187.	Yi-Hao Pai, Chung-Hsiang Chang, and Gong-Ru Lin*, “Composition Optimization and Phase Transformation of Si-Nanocrystal-Doped SiO _x for Enhancing Luminescence from MOSLED”, <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , Vol. 15, No. 5, pp. 1387-1392, September/October 2009.	2.384
❖ ★ 186.	Yi-Hao Pai and Gong-Ru Lin*, “Electrochemical Reduction of Uniformly Dispersed Pt and Ag Nanodots on Carbon Fiber Electrodes”, <i>Journal of Nanomaterials</i> , Vol. 2009, Article ID 384601, January 2009.	0.688
❖ ★ 185.	Gong-Ru Lin*, Tzu-Kang Cheng, Yi-Hung Lin, Gong-Cheng Lin, and Hai-Lin Wang, “Suppressing Chirp and Power Penalty of Channelized ASE Injection-Locked Mode-Number Tunable Weak-Resonant-Cavity FPLD Transmitter”, <i>IEEE Journal of Quantum Electronics</i> , Vol. 45, No. 9, pp. 1106-1113, September 2009.	2.413
❖ ★ 184.	Gong-Ru Lin*, Hai-Lin Wang, Gong-Cheng Lin, Yin-Hsun Huang, Yi-Hung Lin, and Tzu-Kang Cheng, “Comparison on Injection-Locked Fabry-Perot Laser Diode With Front-Facet Reflectivity of 1% and 30% for Optical Data Transmission in WDM-PON System”, <i>IEEE/OSA Journal of Lightwave Technology</i> , Vol. 27, No. 14, pp. 2779-2785, July 2009.	2.736

❖ ★ 183.	Gong-Ru Lin*, Chung-Lun Wu, Cheng-Wei Lian, and Hung-Chun Chang, "Saturated small-signal gain of Si Quantum Dots embedded in SiO ₂ /SiO _x /SiO ₂ strip-loaded waveguide amplifier made on Quartz", <i>Applied Physics Letter</i> , Vol. 95, No. 2, 021106, July 2009.	3.596
❖ ★ 182.	Gong-Ru Lin*, Tzu-Kang Cheng, Yu-Chieh Chi, Gong-Cheng Lin, Hai-Lin Wang, and Yi-Hung Lin, "200-GHz and 50-GHz AWG channelized linewidth dependent transmission of weak-resonant-cavity FPLD injection-locked by spectrally sliced ASE", <i>Optics Express</i> , Vol. 17, No. 20, pp. 17739-17746, September 2009.	3.880
❖ ★ 181.	Wei-Lun Hsu, Yi-Hao Pai, Fan-Shuen Meng, Chee-Wee Liu, and Gong-Ru Lin*, "Nanograin Crystalline Transformation Enhanced UV Transparency of Annealing Refined Indium Tin Oxide Film", <i>Applied Physics Letters</i> , Vol. 94, No. 23, 231906, June 2009.	3.596
❖ 180.	Cheng-Tao Lin, Cheewee Liu, and Gong-Ru Lin*, "Luminescent-wavelength tailoring silicon-rich silicon nitride LED," <i>Chinese Optics Letters</i> , Vol. 7, No. 4, pp. 277-279, September 2009.	0.804
❖ 179.	Wei-Lun Hsu, Cheng-Tao Lin, Tzu-Huan Cheng, Shih-Chiang Yen, Chee-Wee Liu, Din-Ping Tsai, and Gong-Ru Lin*, "Annealing induced refinement on optical transmission and electrical resistivity of indium tin oxide," <i>Chinese Optics Letters</i> , Vol. 7, No. 3, pp. 263-265, 2009.	0.804
❖ 178.	Chien Cheng Liu, Meng Lun Wu, Kuang Chung Liu, Shih-Hua Hsiao, Yu Sheng Chen, Gong-Ru Lin, and JianJang Huang*, "Transparent ZnO Thin-Film Transistors on Glass and Plastic Substrates Using Post-Sputtering Oxygen Passivation," <i>Journal of Display Technology</i> , Vol. 5, Issue 6, pp. 192-197, June 2009.	1.928
❖ ★ 177.	Chao-Kuei Lee, Jung-Jui Kang, Gong-Ru Lin*, "Competition of Rational Harmonic Mode-Locking and Continuous-Wave Lasing in Semiconductor Optical Amplifier Fiber Laser Under Optical Pulse Injection," <i>IEEE/OSA Journal of Lightwave Technology</i> , Vol. 27, No. 5-8, pp. 851-856, April 2009.	2.736
❖ ★ 176.	C Y Chen, C A Lin, M J Chen, Gong-Ru Lin, and Jr-Hau He*, "ZnO/Al ₂ O ₃ core-shell nanorod arrays: growth, structural characterization, and luminescent properties," <i>Nanotechnology</i> , Vol. 20, No.18, 185605, May 2009.	3.310
❖ ★ 175.	Peng-Chun Peng*, Fang-M.ing Wu, Wen-Jr Jiang, Ruei-Long Lan, Chun-Ting Lin, Jason (Jyehong) Chen, Po Tsung Shih, Gong-Ru Lin, and Sien Chi, "RF phase shifter using a distributed feedback laser in microwave transport systems," <i>Optics Express</i> , Vol. 17, No. 9, pp. 7609-7614, April 2009.	3.880
❖ ★ 174.	Kuei-Huei Lin, Jung-Jui Kang, Hsiao-Hua Wu, Chao-Kuei Lee, and Gong-Ru Lin*, "Manipulation of operation states by polarization control in an erbium-doped fiber laser with a hybrid saturable absorber," <i>Optics Express</i> , Vol. 17, Issue 6, pp. 4806-4814, March 2009.	3.880
❖ ★ 173.	Yu-Sheng Liao, Hao-Chung Kuo, Yung-Jui Chen, and Gong-Ru Lin*, "Side-mode transmission diagnosis of a multi-channel selectable injection-locked Fabry-Perot Laser Diode with anti-reflection coated front facet," <i>Optics Express</i> , Vol. 17, No. 6, pp. 4859-4867, March 2009.	3.880
❖ ★ 172.	Yu-Chan Lin, Guo-Hsuan Peng, and Gong-Ru Lin*, "Compression of 200GHz DWDM channelized TDM pulsed carrier from optically mode-locking WRC-FPLD Fiber Ring at 10 GHz," <i>Optics Express</i> , Vol. 17, No. 7, pp. 5526-5532, March 2009.	3.880
❖ ★ 171.	Jung-Jui Kang, Yu-Chan Lin, Chao-Kuei Lee, and Gong-Ru Lin*, "Peak equalization of rational-harmonic-mode-locking fiberized semiconductor laser pulse via optical injection induced gain modulation," <i>Optics Express</i> , Vol. 17, No. 2, pp. 850-859, January 2009.	3.880
❖ ★ 170.	Yi-Hao Pai, Fan-Shuen Meng, Chun-Jung Lin, Hao-Chung Kuo, Shih-Hsin Hsu, Yia-Chung Chang, and Gong-Ru Lin*, "Aspect-ratio-dependent ultra-low reflection and luminescence of dry-etched Si nanopillars on Si substrate," <i>Nanotechnology</i> , Vol. 20, No. 3, 035303, January 2009.	3.310
2008 (SCI: 10)		
❖ ★ 169.	Chin-Hua Hsieh, Li-Jen Chou*, Gong-Ru Lin, Yoshio Bando, and Dimitri Golberg, "Nanophotonic Switch: Gold-in-Ga ₂ O ₃ Peapod Nanowires," <i>Nano Letters</i> , Vol. 8, No. 10, pp. 3081-3085, October 2008.	9.627
❖ ★ 168.	Guo-Hsuan Peng, Yu-Chieh Chi, and Gong-Ru Lin*, "DWDM channel spacing tunable optical TDM carrier from a mode-locked weak-resonant-cavity Fabry-Perot laser diode based fiber ring", <i>Optics Express</i> , Vol. 16, No. 17, pp. 13405-13413, August 2008.	3.880
❖ ★ 167.	Gong-Ru Lin*, Yi-Hao Pai, and Cheng-Tao Lin, "Microwatt MOSLED Using SiO _x With Buried Si Nanocrystals on Si Nano-Pillar Array", <i>Journal of Lightwave Technology</i> , Vol. 26, No. 11, pp. 1486-1491, June 2008.	2.736

❖ * 166.	Gong-Ru Lin*, Chao-Kuei Lee, and Jung-Jui Kang, "Rational harmonic mode-locking pulse quality of the dark-optical-comb injected semiconductor optical amplifier fiber ring laser", <i>Optics Express</i> , Vol. 16, No. 12, pp. 9213-9221, June 2008.	3.880
❖ * 165.	Gong-Ru Lin*, Kun-Chieh Yu, and Mu-Chieh Lo, "All-optical RZ data conversion with temporally and spectrally gain-sliced semiconductor optical amplifier via broadband optical injection", <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , Vol. 14 No. 3, pp. 789-800, May/June 2008.	2.384
❖ * 164.	Shih-Hsin Hsu, En-Shao Liu, Yia-Chung Chang, James N. Hilfiker, Young Dong Kim, Tae Jung Kim, Chun-Jung Lin, and Gong-Ru Lin, "Characterization of Si nanorods by spectroscopic ellipsometry with efficient theoretical modeling", <i>Physica Status Solidi A-Applications and Materials Science</i> , Vol. 205, No. 4, pp. 876-879, Apr. 2008.	1.214
❖ * 163.	Chia-Chi Lin, Hao-Chung Kuo, Peng-Chun Peng, and Gong-Ru Lin*, "Chirp and error rate analyses of an optical-injection gain-switching VCSEL based all-optical NRZ-to-PRZ converter", <i>Optics Express</i> , Vol. 16, No. 7, pp. 4838-4847, March 2008.	3.880
❖ * 162.	Gong-Ru Lin*, "Spectroscopic analysis on metal-oxide-semiconductor light-emitting diodes with buried Si nanocrystals and nano-pyramids in SiO _x film", <i>Invited Paper, Journal of Nanoscience and Nanotechnology</i> , Vol. 8, No. 3, pp. 1092-1100, Mar. 2008.	1.987
❖ * 161.	Gong-Ru Lin*, "Enabling light emission from Si based MOSLED on surface nano-roughened Si substrate", <i>Invited Paper, IEICE Transactions on Electronics</i> , Vol. E91C, No. 2, pp. 173-180, Feb. 2008.	0.436
❖ * 160.	J.-W. Shi, J.-K. Sheu, C.-H. Chen, Gong-Ru Lin*, and W.-C. Lai, "High-speed GaN-based green light-emitting diodes with partially n-doped active layers and current-confined apertures," <i>IEEE Electron Device Letters</i> , Vol. 29, No. 2, pp. 158-160, February 2008.	2.486
2007 (SCI: 17)		
❖ * 159.	Gong-Ru Lin*, Ci-Ling Pan and Ying-Tsung Lin, "Self-Steepening of Prechirped Amplified and Compressed 29-fs Fiber Laser Pulse in Large-Mode-Area Erbium-Doped Fiber Amplifier", <i>IEEE/OSA Journal of Lightwave Technology</i> , Vol. 25, No. 11, pp. 3597-3601, November 2007. 林瑩聰同學獲得 2006 年中國光學工程學會碩士論文獎.	2.736
❖ 158.	C. J. Lin and Gong-Ru Lin*, "A CO ₂ laser rapid-thermal-annealing SiO _x based metal-oxide-semiconductor light emitting diode," <i>Chinese Optics Letters</i> , Vol. 5, No. 10 pp. 601-601, 2007.	0.804
❖ 157.	Gong-Ru Lin*, "Enhanced electroluminescence from nanocrystallite Si based MOSLED by interfacial Si nanopyramids," <i>Chinese Optics Letters</i> , Vol. 5, No. 11, pp. 671-673, 2007.	0.804
❖ * 156.	Gong-Ru Lin*, Ci-Ling Pan, and Kun-Chieh Yu, "Dynamic chirp control of all-optical format-converted from a multi-wavelength inverse-optical-comb injected semiconductor optical amplifier", <i>Optics Express</i> , Vol. 15, No. 20, pp. 13330-13339, October 2007.	3.797
❖ * 155.	Chieh-Yu Kang, Cha-Hsin Chao, Shu-Chia Shiu, Li-Jen Chou, Mu-Tung Chang, Gong-Ru Lin, and Ching-Fuh Lin*, "Formation of self-organized platinum nanoparticles and their microphotoluminescence enhancement in the visible light region," <i>Journal of Applied Physics</i> , Vol. 102, No. 7, pp. 073508, October 2007.	2.255
❖ * 154.	Gong-Ru Lin*, Chun-Jung Lin, and Cheng-Tao Lin, "Low-plasma and high-temperature PECVD grown silicon-rich SiO _x film with enhanced carrier tunneling and light emission," <i>Nanotechnology</i> , Vol. 18, No. 39, pp. 395202, October 2007.	3.176
❖ * 153.	Gong-Ru Lin*, Chun-Jung Lin, and Hao-Chung Kuo, "Improving carrier transport and light emission in a silicon-nanocrystal based MOS light-emitting diode on silicon nanopillar array", <i>Applied Physics Letters</i> , Vol. 91, No. 9, pp. 093122, August 2007.	4.308
❖ * 152.	Gong-Ru Lin* and Chun-Jung Lin, "CO ₂ laser rapid-thermal-annealing SiO _x based metal-oxide-semiconductor light emitting diode", <i>Applied Physics Letters</i> , Vol. 91, No. 7, pp. 072103, August 2007.	4.308
❖ * 151.	Gong-Ru Lin* and Chia-Yang Chen, "Enhanced Pumping Energy Transfer between Si Nanocrystals and Erbium Ions in Si-rich SiO _x Sputtered Using Si/Er ₂ O ₃ Encapsulated SiO Substrate", <i>Journal of Nanoscience and Nanotechnology</i> , Vol. 7, No. 8, pp. 2841-2847, July 2007.	2.017
❖ * 150.	Gong-Ru Lin*, Kun-Chieh Yu, and Yu-Sheng Liao, "All-optical decision-gating of 10-Gb/s RZ data in a semiconductor optical amplifier temporally gain-shaped with dark-optical-comb", <i>IEEE/OSA</i>	2.736

	<i>Journal of Lightwave Technology</i> , Vol. 25, No. 7, pp. 1651-1658, July 2007. (游昆潔先生榮獲2006年光電科技研討會學生壁報論文獎)	
❖ ★ 149.	Chun-Jung Lin and Gong-Ru Lin*, "Enhancing Nanocrystallite Si Electroluminescence by Suppressing Oxygen Decomposition in High-Temperature and Low-Plasma-Power PECVD", <i>Journal of the Electrochemistry Society</i> , Vol. 154, No. 8, pp. H743-748, June 2007.	2.361
❖ ★ 148.	Gong-Ru Lin*, Yia-Chung Chang, En-Shao Liu, Hao-Chung Kuo, and Huang-Shen Lin, "Low-Refractive-Index Si Nano-pillars on Si Substrate," <i>Applied Physics Letters</i> , Vol. 90, No. 18, 181923, April 2007.	4.308
❖ ★ 147.	Gong-Ru Lin*, Chun-Jung Lin, and Ya-Chung Chang, "Optical characterization of CO ₂ -laser-ablated Si-rich SiO _x ", <i>Applied Physics Letters</i> , Vol. 90, No. 15, 151903, April 2007.	4.308
❖ ★ 146.	Gong-Ru Lin*, Chun-Jung Lin, Hao-Chung Kuo, Huang-Sheng Lin, and Chi-Chiang Kao, "Anomalous microphotoluminescence of high-aspect-ratio Si nanopillars formatted by dry-etching Si substrate with self-aggregated Ni nanodot mask", <i>Applied Physics Letters</i> , Vol. 90, No. 14, 143102, April 2007.	4.308
❖ ★ 145.	Gong-Ru Lin*, Ying-Tsung Lin, and Chao-Kuei Lee, "Simultaneous pulse amplification and compression in all-fiber-integrated pre-chirped large-mode-area Er-doped fiber amplifier", <i>Optics Express</i> , Vol. 15, No. 6, pp. 2993-2999, March 2007. 林瑩聰同學獲得 2006 年中國電機工程學會青年論文獎第二名.	3.797
❖ ★ 144.	Gong-Ru Lin*, Chun-Jung Lin, and Chi-Kuan Lin, "Enhanced Fowler-Nordheim Tunneling Effect in Nanocrystallite Si Based LED with Interfacial Si Nano-pyramids", <i>Optics Express</i> , Vol. 15, No. 5, pp. 2555-2563, March 2007.	3.797
❖ ★ 143.	Gong-Ru Lin* and Jun-Yuan Chang, "Femtosecond L-band Mode-Locked Erbium-Doped Fiber Laser with Intra-cavity Loss Controlled Full L-band Wavelength Tunability", <i>Optics Express</i> , Vol. 15, No. 1, pp. 97-103, January 2007.	3.797
2006 (SCI: 16)		
❖ ★ 142.	Yu-Sheng Liao and Gong-Ru Lin*, "Comparison on the Sensitivity of Fiber-Optic SONET OC-48 PIN-TIAs Measured by Using Synchronous Modulation Intermixing Technique and Bit Error Rate Tester", <i>IEEE Transactions on Instrumentation and Measurements</i> , Vol. 55, No. 6, pp. 2172-2175, December 2006.	0.703
❖ ★ 141.	Gong-Ru Lin*, Chun-Jung Lin, Yu-Lun Chueh, and Li-Jen Chou, "Localized CO ₂ Laser Annealing Induced Dehydrogenation/Ablation and Optical Refinement of Si-Rich SiO _x Film with Embedded Si Nanocrystals", <i>Journal of Nanoscience and Nanotechnology</i> , Vol. 6, No. 12, pp. 3710-3717, December 2006.	2.017
❖ ★ 140.	Gong-Ru Lin*, Hai-Han Lu, and Jun-Yuan Chang, "Wavelength Tunability of a Coupler and Air-Gap Etalon Controlled High-Efficiency L-Band Mode-Locked Erbium-Doped Fiber Laser", <i>IEEE Photonics Technology Letters</i> , Vol. 18, No. 21, pp. 2233-2235, November 2006. (張峻源同學榮獲 2005 年光電科技研討會學生論文獎)	2.552
❖ ★ 139.	Gong-Ru Lin*, Jun-Yuan Chang, Yu-Sheng Liao, and Hai-Han Lu, "L-Band Erbium-Doped Fiber Laser with Coupling-Ratio Controlled Wavelength Tunability", <i>Optics Express</i> , Vol. 14, No. 21, pp. 9473-9479, October 2006.	3.797
❖ ★ 138.	Yu-Sheng Liao, Gong-Ru Lin*, Hao-Chung Kuo, Kai-Ming Feng, and Milton Feng, "10-Gb/s Operation of an In _{0.53} Ga _{0.47} As p-i-n Photodiode on Metamorphic InGaP Buffered Semi-Insulating GaAs Substrate", <i>IEEE Photonics Technology Letters</i> , Vol. 18, No. 17, pp. 1822-1824, September 2006.	2.552
❖ ★ 137.	Gong-Ru Lin*, Chun-Jung Lin, Li-Jen Chou, and Yu-Lun Chueh, "Microphotoluminescence and Microphotorefectance Analyses of CO ₂ Laser Rapid-Thermal-Annealed SiO _x Surface With Buried Si Nanocrystals", <i>IEEE Transactions on Nanotechnology</i> , Vol. 5, No. 5, pp. 511-516, September 2006.	3.176
❖ ★ 136.	Gong-Ru Lin*, Chi-Kuan Lin, Li-Jen Chou, and Yu-Lun Chueh, "Synthesis of Si Nanopyramids at SiO _x /Si Interface for Enhancing Electroluminescence of Si-Rich SiO _x ", <i>Applied Physics Letters</i> , Vol. 89, No. 9, 093126, September 2006. <i>Selected by Virtual Journal of Nanoscale Science &</i>	4.308

<i>Technology, Vol. 14, No. 12, September 2006.</i>	
❖ * 135. Gong-Ru Lin*, Hao-Chung Kuo, Huang-Shen Lin, and Chi-Chiang Kao, "Rapid Self-Assembly of Ni Nanodots on Si Substrate covered by a Less-Adhesive and Heat-Accumulated SiO ₂ Layer", <i>Applied Physics Letters</i> , Vol. 89, No. 7, pp. 073108, August 2006. <i>Selected by Virtual Journal of Nanoscale Science & Technology, Vol. 14, No. 9, August 2006.</i>	4.308
❖ * 134. Yu-Sheng Liao, Jin-Wei Shi, Y.-S. Wu, Hao-Chung Kuo, M. Feng, and Gong-Ru Lin*, "Optically Heterodyne Diagnosis of a High-Saturation-Power Undoped InP Sandwiched InGaAs p-i-n Photodiode Grown on GaAs", <i>Optics Express</i> , Vol. 14, No. 12, pp. 5031-5037, June 2006.	3.797
❖ * 133. Gong-Ru Lin* and I-Hsiang Chiu, "110-pJ and 410-fs Pulse at 10 GHz Generated by Single-Stage External Fiber Compression of Optically Injection Mode-Locked Semiconductor Optical Amplifier Fiber Laser", <i>IEEE Photonics Technology Letters</i> , Vol. 18, No. 9, pp. 1010-1012, May 2006.	2.552
❖ * 132. Gong-Ru Lin*, Yung-Cheng Chang, and Kun-Chieh Yu, "All-optical pulse data generation in a semiconductor optical amplifier gain controlled by a reshaped optical clock injection", <i>Applied Physics Letters</i> , Vol. 88, No. 19, 191114, May 2006. <i>Selected by Virtual Journal of Ultrafast Science, Vol. 5, No. 6, June 2006.</i>	4.308
❖ * 131. Ying-Tsung Lin and Gong-Ru Lin*, "Dual-Stage Soliton Compression of a Self-Started Additive Pulse Mode-Locked Erbium-Dope Fiber Laser for 48n fs Pulse Generation", <i>Optics Letters</i> , Vol. 31, No. 10, pp. 1382-1384, May 2006. <i>Selected by Virtual Journal of Ultrafast Science, Vol. 5, No. 7, June 2006.</i>	3.882
❖ * 130. Gong-Ru Lin*, Kun-Chieh Yu, and Yung-Cheng Chang, "10 Gbit/s All-Optical Non-Return to Zero-Return-to-Zero Data Format Conversion Based on a Backward Dark-Optical-Comb Injected Semiconductor Optical Amplifier", <i>Optics Letters</i> , Vol. 31, No. 10, pp. 1376-1378, May 2006. <i>Selected by Virtual Journal of Ultrafast Science, Vol. 5, No. 7, June 2006.</i> (廖育聖與游昆潔先生榮獲九十五年國教育部通訊競賽研究所組優勝)	3.882
❖ * 129. Gong-Ru Lin*, Ci-Ling Pan, and I-Hsiang Chiu, "Supermode-noise-free eighth-order femtosecond soliton from a backward dark-optical-comb-injection mode-locked semiconductor optical amplifier fiber laser", <i>Optics Letters</i> , Vol. 31, No. 6, pp. 835-837, March 2006. <i>Selected by Virtual Journal of Ultrafast Science, Vol. 5, No. 6, June 2006.</i>	3.882
❖ * 128. Chun-Jung Lin, Chi-Kuan Lin, Chih-Wei Chang, Yu-Lun Chuen, Hao-Chung Kuo, Eric Wei-Guang Diau, Li-Jen Chou, and Gong-Ru Lin*, "Photoluminescence of Plasma Enhanced Chemical Vapor Deposition Amorphous Silicon Oxide with Silicon Nanocrystals Grown at Different Fluence Ratios and Substrate Temperatures", <i>Japanese Journal of Applied Physics</i> , Pt. 1, Vol. 45, No. 2A, pp. 1040-1043, February 2006.	1.171
❖ * 127. Chun-Jung Lin, Chao-Kuei Lee, Eric Wei-Guang Diau, and Gong-Ru Lin*, "Time-resolved photoluminescence analysis of multidosed Si-ion-implanted SiO ₂ ", <i>Journal of Electrochemistry Society</i> , vol. 153, No. 2, pp. E25-E32, February 2006. <i>Selected by Virtual Journal of Ultrafast Science, Vol. 5, No. 1, January 2006.</i>	2.361
2005 (SCI: 17)	
❖ * 126. Tze-An Liu, Gong-Ru Lin, Yung-Cheng Chang, and Ci-Ling Pan*, "Wireless Audio and Burst Communication Link with Directly Modulated THz Photoconductive Antenna", <i>Optics Express</i> , Vol. 13, No. 25, pp. 10416-10423, December 2005. <i>Selected by Virtual Journal of Ultrafast Science, Vol. 5, No. 1, January 2006.</i>	3.797
❖ * 125. Chun-Jung Lin, Gong-Ru Lin*, Yu-Lun Chueh, and Li-Jen Chou, "Synthesis of Silicon Nanocrystals in Silicon-rich SiO ₂ by Rapid CO ₂ Laser Annealing", <i>Electrochemical and Solid-State Letters</i> , Vol. 8, No. 12, pp. D43-D45, December 2005.	2.742
❖ * 124. Gong-Ru Lin* and I-Hsiang Chiu, "Femtosecond wavelength tunable semiconductor optical amplifier fiber laser mode-locked by backward dark-optical-comb injection at 10 GHz", <i>Optics Express</i> , Vol. 13, No. 22, pp. 8772-8780, October 2005. <i>Selected by Virtual Journal of Ultrafast Science, Vol. 5, No. 1, January 2006.</i>	3.797
❖ * 123. Gong-Ru Lin*, Ming-Chung Wu, Yung-Cheng Chang, and Ci-Ling Pan, "Ultrahigh supermode noise suppressing ratio of a semiconductor optical amplifier filtered harmonically mode-locked Erbium-doped fiber laser", <i>Optics Express</i> , Vol. 13, No. 18, pp. 7215-7224, September 2005. 吳銘	3.797

忠同學獲得 2005 年中國電機工程學會青年論文獎第三名。	
❖ * 122. Yung-Cheng Chang and <u>Gong-Ru Lin*</u> , "Injection-locking laser-diode-based OC-192 optical non-return-to-zero-to-return-to-zero OR logic gate", <i>Optics Letters</i> , Vol. 30, No. 16, pp. 2704-2706, August 2005.	3.882
❖ * 121. <u>Gong-Ru Lin*</u> , Ming-Chung Wu, and Yung-Cheng Chang, "Suppression of Phase and Supermode Noises in a Harmonic Mode-Locked Erbium-Doped Fiber Laser with a Semiconductor Optical Amplifier Based High-Pass Filter", <i>Optics Letters</i> , Vol. 30, No. 14, pp. 1834-1836, July 2005. <i>Selected by Virtual Journal of Ultrafast Science, Vol. 4, No. 7, July 2005.</i>	3.882
❖ * 120. Tze-An Liu, <u>Gong-Ru Lin*</u> , Yen-Chi Lee, Shing-Chung Wang, Masahiko Tani, Hsiao-Hua Wu, and Ci-Ling Pan, "Dark Current and Trailing-Edge Suppression in Ultrafast Photoconductive Switches and Terahertz Spiral Antennas Fabricated on Multienergy Arsenic-Ion-Implanted GaAs", <i>Journal of Applied Physics</i> , Vol. 98, No. 1, pp. 013711, July 2005. <i>Selected by Virtual Journal of Ultrafast Science, Vol. 4, No. 8, August 2005.</i>	2.255
❖ * 119. <u>Gong-Ru Lin*</u> , Yung-Cheng Chang, Yu-Huang Lin, and J. H. Chen, "All-Optical Data Format Conversion in Synchronously Modulated Single-Mode Fabry-Perot Laser Diode Using External Injection-Locking-Induced Nonlinear Threshold Reduction Effect", <i>IEEE Photonics Technology Letters</i> , Vol. 17, No. 6, pp. 1307-1309, June 2005.	2.552
❖ * 118. <u>Gong-Ru Lin*</u> , Hao-Chung Kuo, Chi-Kuang Lin, and Milton Feng, "Ultralow Leakage In _{0.53} Ga _{0.47} As p-i-n Photodetector Grown on Linearly Graded Metamorphic In _x Ga _{1-x} P Buffered GaAs Substrate", <i>IEEE Journal of Quantum Electronics</i> , Vol. 41, No. 6, pp. 749-752, June 2005.	3.675
❖ * 117. Yung-Cheng Chang, Yu-Huang Lin, Yu-Sheng Liao, and <u>Gong-Ru Lin*</u> , "Switchable dual-wavelength NRZ-to-RZ data-format transformer using non-DC-biased and synchronously modulated laser diode", <i>IEICE Transactions on Electronics</i> , Vol. E88-C, No. 5, pp. 981-983, May 2005.	0.500
❖ * 116. Yung-Cheng Chang and <u>Gong-Ru Lin*</u> , "10 Gbit/s tunable dual-wavelength nonreturn-to-zero-to-return-to-zero data-format transformer based on a non-direct-current-biased Fabry-Perot laser diode", <i>Applied Optics</i> , Vol. 44, No. 15, pp. 3058-3062, May 2005.	1.799
❖ * 115. <u>Gong-Ru Lin*</u> , Chun-Jung Lin, Chi-Kuan Lin, Li-Jen Chou, and Yu-Lun Chueh, "Oxygen defect and Si nanocrystal dependent white-light and near-infrared electroluminescence of Si-implanted and plasma-enhanced chemical-vapor deposition-grown Si-rich SiO ₂ ", <i>Journal of Applied Physics</i> , Vol. 97, No. 9, pp. 094306, May 2005.	2.255
❖ * 114. <u>Gong-Ru Lin*</u> and Yu-Sheng Liao, "Sensitivity evaluation of fiber optic OC-48 p-i-n transimpedance amplifier receivers using sweep-frequency modulation and intermixing diagnostics", <i>Optical Engineering</i> , Vol. 44, No. 4, pp. 044002, April 2005.	0.952
❖ * 113. <u>Gong-Ru Lin*</u> and Jung-Rung Wu, "Tenth-Order Rational Harmonic Frequency Multiplication and detuning of Optical Pulse Injection-Locked Erbium-Doped Fiber Laser", <i>Applied Optics</i> , Vol. 44, No. 12, pp. 2416-2420, April 2005.	1.799
❖ * 112. Chun-Jung Lin and <u>Gong-Ru Lin*</u> , "Defect-Enhanced Visible Electroluminescence of Multi-Energy Silicon-Implanted Silicon Dioxide Film", <i>IEEE Journal of Quantum Electronics</i> , Vol. 41, No. 3, pp. 441-447, March 2005. (林俊榮同學獲得 2005 年宏碁龍騰知識經濟論文優等獎)	3.675
❖ * 111. <u>Gong-Ru Lin*</u> , Pai-Shen Hsueh, Hsiao-Hua Wu, and Yu-Sheng Liao, "The detuning characteristics of rational harmonic mode-locked semiconductor optical amplifier fiber-ring laser using backward optical sinusoidal-wave injection modulation", <i>IEEE/OSA Journal of Lightwave Technology</i> , Vol. 23, No. 3, pp. 1325-1333, March 2005.	2.736
❖ * 110. <u>Gong-Ru Lin*</u> , I-Hsiang Chiu, and Ming-Chung Wu, "1.2-ps mode-locked semiconductor optical amplifier fiber laser pulses generated by 60-ps backward dark-optical comb injection and soliton compression", <i>Optics Express</i> , Vol. 13, No. 3, pp. 1008-1014, February 2005. <i>Selected by Virtual Journal of Ultrafast Science, Vol. 4, No. 4, April 2005.</i>	3.797
2004 (SCI: 16)	
❖ * 109. Yung-Cheng Chang, Yu-Huang Lin, J. H. Chen, and <u>Gong-Ru Lin*</u> , "All-optical NRZ-to-PRZ format transformer with an injection-locked Fabry-Perot laser diode at unlasing condition", <i>Optics Express</i> , Vol. 12, No. 19, pp. 4449-4456, September 2004. (張詠誠先生榮獲財團法人徐有庠基金)	3.797

會第三屆通信光電類科技論文獎)

❖ ★ 108.	Gong-Ru Lin*, Chun-Jung Lin, and Kuo-Cheng Yu, "Time-Resolved Photoluminescence and Capacitance-Voltage Analysis of the Neutral Vacancy Defect in Silicon Implanted SiO ₂ on Silicon Substrate", <i>Journal of Applied Physics</i> , Vol. 96, No. 5, pp. 3025-3027, September 2004. Selected by Virtual Journal of Ultrafast Science, Vol. 3, No. 10, October 2004.	2.255
❖ ★ 107.	Gong-Ru Lin*, Jung-Rung Wu, and Yung-Cheng Chang, "Photonic millimeter-wave generation from frequency-multiplied Erbium-doped fiber laser pulse-train using purely sinusoidal-wave modulated laser diode", <i>Optics Express</i> , Vol. 12, No. 17, pp. 4166-4171, August 2004.	3.797
❖ ★ 106.	Gong-Ru Lin*, Gong-Cheng Lin, and Jung-Rung Wu, "Optical-Pulse-Injection-Induced 40 GHz Photonic Frequency Multiplication in Erbium-Doped Fiber Laser", <i>Japanese Journal of Applied Physics</i> , Pt. 1, Vol. 43, No. 8A, pp. 5285-5288, August 2004.	1.171
❖ ★ 105.	Gong-Ru Lin*, Yu-Sheng Liao, and Jung-Rung Wu, "Harmonic Injection-Locking Behavior of Frequency-Detuned Optical Pulse in Erbium-Doped Fiber Laser", <i>Japanese Journal of Applied Physics</i> , Pt. 1, Vol. 43, No. 8A, pp. 5204-5208, August 2004.	1.171
❖ ★ 104.	Gong-Ru Lin*, Kuo-Cheng Yu, Chun-Jung Lin, Hao-Chung Kuo, and Miao-Chio Ou-Yang, "Pumping Intensity Dependent Surface Charge Accumulation and Redshifted Microphotoluminescence of Silicon-Implanted Quartz", <i>Applied Physics Letters</i> , Vol. 85, No. 6, pp. 1000-1002, August 2004.	4.308
❖ ★ 103.	Gong-Ru Lin*, Chun-Jung Lin, and Chi-Kuan Lin, "Defect-Enhanced Photoconductive Response of Silicon-Implanted Borosilicate Glass", <i>Applied Physics Letters</i> , Vol. 85, No. 6, pp. 935-937, August 2004.	4.308
❖ ★ 102.	Yu-Huang Lin and Gong-Ru Lin*, "Mode Beating Noise Reduction of Mutually Injection-Locked Erbium-Doped Fiber Laser and Laser Diode Link", <i>IEEE Photonics Technology Letters</i> , Vol. 16, No. 8, pp. 1819-1821, August 2004. (林鈺晃先生榮獲 2004 中華民國光學工程學會碩士論文獎)	2.552
❖ ★ 101.	Gong-Ru Lin*, Yung-Cheng Chang, and Jung-Rung Wu, "Rational Harmonic Mode-Locking of Erbium-Doped Fiber Laser at 40 GHz Using a Loss-Modulated Fabry Perot Laser Diode", <i>IEEE Photonics Technology Letters</i> , Vol. 16, No. 8, pp. 1810-1812, August 2004. Reported by Jeff Hecht in Laser Focus World, p. 81, December 2004	2.552
❖ ★ 100.	Gong-Ru Lin*, Yu-Huang Lin, and Yung-Cheng Chang, "Theory and Experiments of a Mode-Beating Noise-Suppressed and Mutually Injection-Locked Fabry-Perot Laser Diode and Erbium-Doped Fiber Amplifier Link", <i>IEEE Journal of Quantum Electronics</i> , Vol. 40, No. 8, pp. 1014-1022, August 2004. (林鈺晃先生榮獲 2004 中國電機工程師學會青年論文獎)	3.675
❖ ★ 99.	Gong-Ru Lin* and Chun-Jung Lin, "Improving Blue-Green Electroluminescence of Metal-Oxide-Semiconductor Diode on Multirecipe Si-Ion-Implanted and Annealed SiO ₂ /Si substrate", <i>Journal of Applied Physics</i> , Vol. 95, No. 12, pp. 8482-8486, June 2004.	2.255
❖ ★ 98.	Li-Hong Lai, H.-C. Kuo*, Gong-Ru Lin, Lih-Wen Lai, and S. C. Wang, "As ⁺ -implanted AlGaAs oxide-confined VCSEL with enhanced oxidation rate and high performance uniformity", <i>IEEE Photonics Technology Letters</i> , Vol. 16, No. 6, pp. 1423-1425, June 2004.	2.552
❖ ★ 97.	Gong-Ru Lin* and Yu-Sheng Liao, "Dynamics of optical backward injection induced gain-depletion modulation and mode locking in semiconductor optical amplifier fiber laser", <i>Optics Express</i> , Vol. 12, No. 10, pp. 2017-2026, May 2004. Selected by Virtual Journal of Ultrafast Science, Vol. 3, No. 6, June 2004.	3.797
❖ ★ 96.	Zheng-Mao Wu, Giang-Qiong Xia, and Gong-Ru Lin, " Effects of gain shift and wavelength dependence of semiconductor light amplifiers on picosecond optical pulses ", <i>Chinese Journal of Physics</i> , Vol. 42, No. 1, pp. 74-78, February 2004	0.372
❖ ★ 95.	Giang-Qiong Xia, Zheng-Mao Wu, and Gong-Ru Lin, " Studies on the amplified picosecond optical pulse by semiconductor light amplifiers using an improved model ", <i>ACTA Physica SINICA (ACTA PHYS SIN-CH ED)</i> , Vol. 53, No. 2, pp. 490-493, February 2004.	1.250
❖ ★ 94.	Gong-Ru Lin* and Pai-Shen Hsueh, "Spectral Characteristics of a Regenerative Semiconductor Optical Amplifier Mutually Injection-Locked with a Fabry-Perot Laser Diode", <i>Applied Optics</i> , Vol. 43, No. 1, pp. 153-159, January 2004.	1.799
★ 93.	Yi-Shiang Chu, Yu-Sheng Liao, Yu-Huang Lin, Yung-Cheng Chang, and Gong-Ru Lin*, "The effect	

of backward injecting wavelength on the mode-locking dynamics of a semiconductor amplifier based fiber laser”, *Proceedings of SPIE*, Vol. 5624, pp. 327-334, November 2004.

★ 92. Chi-Kuan Lin, Hao-Chung Kuo, Yu-Sheng Liao, and Gong-Ru Lin*, “Low-leakage $\text{In}_{0.53}\text{Ga}_{0.47}\text{As}$ p-i-n photodetector fabricated on GaAs substrate with linearly graded metamorphic $\text{In}_x\text{Ga}_{1-x}\text{P}$ buffer”, *Proceedings of SPIE*, Vol. 5624, pp. 399-406, November 2004.

★ 91. Chun-Jung Lin, Kuo-Cheng Yu, Hao-Chung Kuo, Miao-Jia Ou-yang, and Gong-Ru Lin*, “Correlation between surface charge accumulation and excitation intensity dependent red-shifted micro-photoluminescence of Si-implanted quartz with embedded Si nanocrystals”, *Materials Research Society Symposium Proceedings*, Vol. 808, pp. 23-28, 2004.

★ 90. Gong-Ru Lin* and Yu-Sheng Liao, “Comparison on the sensitivity of fiber-optic SONET OC-48 PIN-TIA receivers measured by using synchronous modulation inter-mixing technique and bit-error-rate tester”, *Proceedings of SPIE*, Vol. 5279, pp. 296-302, May 2004.

★ 89. Ming-Chung Wu, Yung-Cheng Chang, and Gong-Ru Lin*, “Comparison on the noise and jitter characteristics of harmonic injection-locked and mode-locked erbium-doped fiber lasers”, *Proceedings of SPIE*, Vol. 5623, pp. 643-651, November 2004.

★ 88. Yung-Cheng Chang and Gong-Ru Lin*, “Frequency detuning properties of EDFL pulses generated by harmonic mode-locking and regenerative amplification: A comparison”, *Proceedings of SPIE*, Vol. 5335, pp. 238-244, January 2004.

2003 (SCI: 8)

❖ ★ 87. Gong-Ru Lin*, “Effect of Low-Temperature Annealing on the Luminescent Lifetime and Negative Differential Resistance of Silicon-Implanted Borosilicate Glass”, *Journal of Applied Physics*, Vol. 94, No. 12, pp. 7542-7546, December 2003. 國科會補助編號 NSC92-2215-E-009-008 2.255

❖ ★ 86. Giang-Qiong Xia*, Zheng-Mao Wu, and Gong-Ru Lin, “Rising and Falling Time of Amplified Picosecond Optical Pulses by Semiconductor Optical Amplifiers”, *Optics Communications*, Vol. 227, No. 1-3, pp. 165-170, November 2003. 國科會補助編號 NSC 91-2215-E-009-039 1.581

❖ ★ 85. Gong-Ru Lin* and J.-R. Wu, “Linewidth Reduction and Wavelength Tuning of Erbium-Doped Fiber Laser Using a Single-Mode-Selected and Side-Mode-Suppressed Fabry-Perot Laser Diode”, *Applied Optics*, Vol. 42, No. 27, pp. 5477-5482, September 2003. 國科會補助編號 NSC 91-2215-E-009-039 1.799

❖ ★ 84. Gong-Ru Lin* and Gong-Cheng Lin, “Improving the Quantum Efficiency of Erbium-Doped Fiber Laser by Using a Low-Loss Tipped Fiber Splicing Process”, *IEEE Photonics Technology Letters*, Vol. 15, No. 9, pp. 1201-1203, September 2003. **Reported by Photonics Spectra, pp. 86-87, November 2003.** 國科會補助編號 NSC 91-2215-E-009-039 2.552

❖ ★ 83. Gong-Ru Lin* and Shih-Kai Lee, “A Feedback-Injected Fabry-Perot Laser Diode Filtering Technique for Side-Mode Suppression and Linewidth Reduction of Erbium-Doped Fiber Lasers”, *Optics Communications*, Vol. 223, No. 1-3, pp. 67-74, August 2003. 國科會補助編號 NSC 91-2215-E-009-039 1.581

❖ ★ 82. Gong-Ru Lin*, “Mutual Injection Locking of Erbium-Doped Fiber Laser and a Fiber-Pigtailed Fabry-Perot Laser Diode”, *Optics Letters*, Vol. 28, No. 14, pp. 1203-1205, July 2003. 國科會補助編號 NSC 91-2215-E-009-039 3.882

❖ ★ 81. Gong-Ru Lin*, Y.-C. Chang, Tze-An Liu, and Ci-Ling Pan, “A Novel PZT-Controlled Optoelectronic Stabilizer for Jitter and Pulse-Timing Control of Femtosecond Passively Mode-Locked Ti:Sapphire Laser”, *Applied Optics*, Vol. 42, No. 15, pp. 2843-2848, May 2003. 國科會補助編號 NSC 90-2215-E-027-008 1.799

❖ ★ 80. Gong-Ru Lin* and Y.-C. Chang, “Phase-Locked-Loop-Based Delay-Line-Free Picosecond Electro-Optic Sampling System”, *Review of Scientific Instruments*, Vol. 74, No. 4, pp. 2255-2261, April 2003. **Selected by Virtual Journal of Ultrafast Science, Vol. 2, No. 4, April 2003.** 國科會補助編號 NSC 90-2215-E-027-008 1.343

★ 79. Gong-Ru Lin* and Chun-Jung Lin, “CW and Time-Resolved Photoluminescence Analysis of Silicon Implanted Glass Low-Temperature Annealed at Different Times” *Materials Research Society*

	<i>Symposium - Proceedings</i> , Vol. 770, pp. 75-80, 2003	
78.	<u>Gong-Ru Lin*</u> and C.-J. Chang, and K.-C. Yu, “熱退火矽離子佈植二氧化矽金氧半二極體的電致藍綠螢光與電流電壓特性分析”, 工程科技通訊, Engineering Science & Technology Bulletin, NSC, Vol. 67, Issue 10, pp. -, October 2003	
77.	<u>Gong-Ru Lin*</u> and Y.-C. Chang, “可抑制時基紊亂度與控制時基的飛秒級被動鎖模鈦藍寶石雷射之新型壓電控制式光電穩定電路”, 工程科技通訊, Engineering Science & Technology Bulletin, NSC, Vol. 67, Issue 4, pp. 20-26, April 2003	
2002 (SCI: 8)		
❖ *	76. <u>Gong-Ru Lin*</u> , “Free-Running Waveform Characterization Using a Delay-Time Tunable Laser Based Delay-Line-Free Electro-Optic Sampling Oscilloscope”, <i>Optics Communications</i> , Vol. 213, No. 4-6, pp. 339-346, December 2002.	1.581
❖ *	75. <u>Gong-Ru Lin*</u> , “The Structural and Electrical Characteristics of Silicon-Implanted Borosilicate Glass”, <i>Japanese Journal of Applied Physics</i> , Part. 2, Vol. 41, No. 12A, pp. L1379-L1382, December 2002. 國科會補助編號 NSC90-2215-E-027-008	1.171
❖ *	74. <u>Gong-Ru Lin*</u> and Yinchieh Lai, “A Novel Phase-Noise-Suppressed and Delay-Time-Tunable Mode-Locked Erbium-Doped Fiber Laser”, <i>Optics Communications</i> , Vol. 212, No. 1-3, pp. 169-175, October 2002.	1.581
❖ *	73. <u>Gong-Ru Lin*</u> , “Narrow-Linewidth Wavelength-Tunable Fiber Laser Controlled by Intracavity Feedback-Injected Fabry-Perot Laser Diode”, <i>Microwave and Optical Technology Letters</i> , Vol. 35, No. 1, pp. 73-75, October 2002. 國科會補助編號 NSC 90-2215-E-027-008.	0.500
❖ *	72. <u>Gong-Ru Lin*</u> and Yung-Cheng Chang, “Novel Electro-Optic Sampling System with an Optoelectronic Phase-Locked Phase Shifter as a Delay-Time Controller”, <i>Japanese Journal of Applied Physics</i> , Part. 1, Vol. 41, No. 10, pp. 6003-6006, October 2002. 國科會補助編號 NSC90-2215-E-027-008	1.171
❖ *	71. <u>Gong-Ru Lin*</u> , Shih-Kai Lee, Gong-Cheng Lin, and Kuei-Huei Lin, “Picosecond Chirped Pulse Amplification in Traveling-Wave Semiconductor Optical Amplifier”, <i>Microwave and Optical Technology Letters</i> , Vol. 33, No. 2, pp. 202-207, May 2002. 國科會補助編號 NSC 90-2215-E-027-008	0.500
❖ *	70. <u>Gong-Ru Lin*</u> , “A Novel Frequency Discriminated Phase Controller for High Speed Optical Clocks Generated from Laser Diodes”, <i>IEEE Transactions on Instrumentation and Measurement</i> , Vol. 51, No. 2, pp. 252-258, April 2002. 國科會補助編號 90-2215-E-027-008	0.800
❖ *	69. <u>Gong-Ru Lin*</u> and S.-C. Wang, “Comparison of High-Resistivity ZnO Films Sputtered on Different Substrates”, <i>Japanese Journal of Applied Physics</i> , Part. 2, Vol. 41, No. 4A, pp. L398-L401, April 2002. 國科會補助編號 NSC90-2215-E-027-008	1.171
*	68. Pai-Shen Hsueh, Shih-Kai Lee, and <u>Gong-Ru Lin*</u> , “Optically Injection Mode-Locked 1.3 μm Semiconductor Optical Amplifier Fiber Ring Laser by Using Gain-Switching Single-Mode FPLD”, <i>Proceeding of SPIE</i> , Vol. 4913, pp. 48-53, October 2002.	
*	67. <u>Gong-Ru Lin*</u> and Jung-Rung Wu, “Tunable Single-Mode Fiber Laser with a Low-Cost Active Fabry-Perot Filter of Ultra-Narrow-Linewidth and High Side-Mode-Suppressing Ratio”, <i>Proceeding of SPIE</i> , Vol. 4906, pp. 132-139, October 2002.	
*	66. <u>Gong-Ru Lin*</u> and Yung-Cheng Chang, “Optically Injected Rational-Harmonic Mode-Locking of Erbium-Doped Fiber Laser”, <i>Proceeding of SPIE</i> , Vol. 4905, pp. 338-342, October 2002.	
*	65. <u>Gong-Ru Lin*</u> , Yao-Ling Cheng, and Yinchieh Lai, “A regeneratively mode-locked erbium-doped fiber laser with a simple circuitry for jitter reduction and pulse-delay-tuning” <i>Technical Digest of Conference on Optical Fiber Communication</i> , Vol. 70, pp. 309-310, March 2002.	
2001 (SCI: 10)		
❖ *	64. <u>Gong-Ru Lin*</u> and Yung-Cheng Chang, “Equivalent-Time Electro-Optic Sampling by Use of a Picosecond Laser with a Voltage-Controlled Optoelectronic Pulse-Delay Tuning Circuit”, <i>Applied Optics</i> , Vol. 40, No. 30, pp. 5530-5538, October 2001. 國科會補助編號 NSC 90-2215-E-027-008	1.799

❖ ★ 63.	<u>Gong-Ru Lin*</u> and Ci-Ling Pan, "Effect of Thermal Annealing on Band Edge Absorption Spectrum of Arsenic-Ion-Implanted GaAs", <i>Japanese Journal of Applied Physics</i> , Part. 1, Vol. 40, No. 11, pp. 6226-6230, November 2001. 國科會補助編號 NSC89-2215-E-027-007	1.171
❖ ★ 62.	<u>Gong-Ru Lin*</u> , Tze-An Liu, and Ci-Ling Pan, "Correlation between Defect Concentration and Carrier Lifetime of GaAs Grown by Molecular Beam Epitaxy at Different Temperatures", <i>Japanese Journal of Applied Physics</i> , Part. 1, Vol. 40, No. 11, pp. 6239-6242, November 2001. 國科會補助編號 NSC89-2215-E-027-007	1.171
❖ ★ 61.	<u>Gong-Ru Lin*</u> and Chung-Fei Lee, "The Power/Frequency Dependent Pulse Width and Jitter of a 1.55 μm Fabry-Perot Laser Diode Transmitter", <i>Microwave and Optical Technology Letters</i> , Vol. 30, No. 4, pp. 232-234, August 2001. 國科會補助編號 NSC 89-2215-E-036-002	0.500
❖ ★ 60.	<u>Gong-Ru Lin*</u> and Yao-Ling Cheng, "Tuning the Delay-Time of Harmonically Mode-Locked Erbium-Doped Fiber Laser Pulses by a Frequency-Discriminated Phase Shifter", <i>Microwave and Optical Technology Letters</i> , Vol. 30, No. 3, pp. 168-170, August 2001. 國科會補助編號 NSC 89-2215-E-036-002	0.500
❖ ★ 59.	<u>Gong-Ru Lin*</u> and Chin-Chia Hsu, "Optical Transmission Spectroscopy of Semi-Insulating GaAs Substrate Implanted by Arsenic Ions at Different Dosages", <i>Journal of Applied Physics</i> , Vol. 89, No. 11, pp. 6536-6538, June 2001. 國科會補助編號 NSC89-2815-C-036-010-E	2.255
❖ ★ 58.	<u>Gong-Ru Lin*</u> and Yung-Cheng Chang, "A Novel Electro-Optic Sampling System by Using Delay-time Tunable Pulsed Laser Source", <i>Microwave and Optical Technology Letters</i> , Vol. 28, No. 6, pp. 432-434, March 2001. 國科會補助編號 NSC 89-2215-E-036-002	0.500
❖ ★ 57.	<u>Gong-Ru Lin*</u> and Jing Shyang Horng, "A plastic-fibre-bundle-based transducer array for mapping and detection of the end point for Dissolution of a photoresist", <i>Measurement Science and Technology</i> , Vol. 12, No. 3, pp. 273-277, March 2001.	1.118
❖ ★ 56.	<u>Gong-Ru Lin*</u> , "An Improved Fiber-Bundle-Coupler Array for End-Point Detection Process", <i>Japanese Journal of Applied Physics</i> , Pt. 1, Vol. 40, No. 2A, pp. 644-648, February 2001.	1.171
❖ ★ 55.	<u>Gong-Ru Lin*</u> and Ci-Ling Pan, "Characterization of Optically Excited Terahertz Radiation from Arsenic-ion-implanted GaAs", <i>Applied Physics B</i> , Vol. 72, No. 2, pp. 151-155, February 2001.	2.215
★ 54.	<u>Gong-Ru Lin*</u> , Yao-Ling Cheng, and Y. Lai, "Pulse-delay tuning of regeneratively mode-locked erbium-doped fiber laser", <i>Proceedings on Asia-Pacific Microwave Conference</i> , Vol. 1, pp. 366-368, December 2001.	
★ 53.	<u>Gong-Ru Lin*</u> , Gong-Cheng Lin, Woo-Hu Tsai, and Kuei-Huei Lin, "A novel tipped fiber structure for reduction of the fusion-induced coupling loss between erbium-doped and single-mode fibers", <i>Technical Digest of Pacific Rim Conference on Lasers and Electro-Optics</i> , Vol. 2, pp. II242-II243, August 2001.	
★ 52.	<u>Gong-Ru Lin*</u> , Shr-Hsiung Hung, and Y.-C. Chang, "Waveform sampling of free-running frequency prescaled microwave signals by using delay-line-free electro-optic probing technique", <i>Proceeding of Asia-Pacific Microwave Conference 2001</i> , Vol. 1, pp. 369-372, December 2001.	
★ 51.	<u>Gong-Ru Lin*</u> and Shr-Hsiung Hung, "Electro-Optic Sampling of Free-Running Microwave PECL Signals by Using Frequency-Synchronized and Delay-time Tunable Laser Source", <i>Proceeding of SPIE</i> , Vol. 4598, pp. 148-156, November 2001. 國科會補助編號 89-2215-E-027-007	
★ 50.	<u>Gong-Ru Lin*</u> and Chin-Chia Hsu, "Novel Silicon-Rich SiO_2 Photoconductor", <i>Proceeding of SPIE</i> , Vol. 4598, pp. 20-26., November 2001.	
★ 49.	<u>Gong-Ru Lin*</u> , Shih-Kai Lee and Kuei-Huei Lin, "Amplification and Shaping of Picosecond Gigabit Optical Pulse by Using Traveling-Wave Semiconductor Optical Amplifier", <i>Proceeding of SPIE</i> , Vol. 4598, pp. 208-216, November 2001. 國科會補助編號 89-2215-E-027-007	
★ 48.	<u>Gong-Ru Lin*</u> , Shr-Hsiung Hung, and Y.-C. Chang, "Delay-Line-Free Electro-Optic characterization of Free-Running Frequency Microwave Frequency Prescalers", <i>Proceeding of SPIE</i> , Vol. 4580, pp. 496-503, November 2001. 國科會補助編號 89-2215-E-027-007	
★ 47.	<u>Gong-Ru Lin*</u> , Shih-Kai Lee, and Kuei-Huei Lin, "Chirped amplification of picosecond	

gain-switched laser pulse by using traveling-wave semiconductor optical amplifier” *Technical Digest of Pacific Rim Conference on Lasers and Electro-Optics*, Vol. 2, pp. II90-II91, August 2001.

★ 46. Gong-Ru Lin*, Shr-Hsiung Hung, and Y.-C. Chang, “Waveform sampling of free-running frequency prescaled microwave signals by using delay-line-free electro-optic probing technique”, *Technical Digest of Pacific Rim Conference on Lasers and Electro-Optics*, Vol. 2, pp. II734-II735, August 2001.

★ 45. Gong-Ru Lin* and Chin-Chia Hsu, “Photocurrent response of Schottky diode on silicon-implanted SiO₂ substrate”, *Technical Digest of Pacific Rim Conference on Lasers and Electro-Optics*, Vol. 2, pp. II212-II213, August 2001.

★ 44. Gong-Ru Lin*, Y.-C. Chang, Tze-An Liu, and Ci-Ling Pan, “Controlling the relative delay-time and jitter of femtosecond Ti:Sapphire/SBR laser pulse-train by using a frequency-stabilized PZT/mirror”, *Technical Digest of Pacific Rim Conference on Lasers and Electro-Optics*, Vol. 2, pp. II518-II519, August 2001.

★ 43. Gong-Ru Lin*, Shih-Kai Lee and Kuei-Huei Lin, “Chirped Pulse in Traveling-Wave Semiconductor Optical Amplifier”, *Proceeding of SPIE*, Vol. 4581, pp. 504-511., November 2001.

★ 42. Gong-Ru Lin*, Yao-Ling Cheng, Yung-Cheng Chang, and Yinchieh Lai, “Delay-time tunable mode-locked erbium-doped fiber ring laser”, *Proceeding of SPIE*, Vol. 4581, pp. 182-188, November 2001. 國科會補助編號 89-2215-E-027-007

★ 41. Tze-An Liu, Masahiko Tani, Gong-Ru Lin*, and Ci-Ling Pan, “THz emission characteristics of photoconductive antennas with different gap size fabricated on arsenic-ion-implanted GaAs”, *Proceeding of SPIE*, Vol. 4490, pp. 96-103, July 2001.

★ 40. Gong-Ru Lin*, Yung-Cheng Chang, Tze-An Liu, and Ci-Ling Pan, “Photonic phase-tuning circuit for controlling the delay-time of passively mode-locked Ti:sapphire laser”, *Proceeding of SPIE*, Vol. 4490, pp. 16-21, July 2001.

★ 39. Gong-Ru Lin* and Y.-C. Chang, “A Delay-Line-Free High-Speed Electro-Optic Sampler”, *Proceedings of SPIE*, Vol. 4416, pp. 288-293, June 2001. 國科會補助編號 NSC 89-2215-E-036-002

★ 38. Gong-Ru Lin*, and Y.-C. Chang, “A Novel Delay-Time Tunable Pulsed Laser Source”, *Proceedings of SPIE*, Vol. 4285, pp. 48-59, January 2001. 國科會補助編號 NSC 89-2215-E-036-002

★ 37. Gong-Ru Lin*, Yao-Ling Cheng, and Y. Lai, “Phase-shift-keying of actively mode-locked erbium-doped fiber ring laser by using an inherent delay-locked-loop”, *Technical Digest of Pacific Rim Conference on Lasers and Electro-Optics*, Vol. 2, pp. II334-II335, 2001.

★ 36. Chung-Fei Lee and Gong-Ru Lin*, “The performance of single-mode light source generated from EDFA fiber ring cavity under Fabry-Perot laser diode injection” *Proceeding of Asia-Pacific Microwave Conference*, Vol. 1, pp. 373-375, 2001

★ 35. G.-R. Lin*, Y.-C. Chang, T.-A. Liu, and C.-L. Pan “Tuning the delay-time of passively mode-locked Ti:Sapphire/SBR laser by using phase-discriminating technology”, *Technical Digest of Conference on Lasers and Electro-Optics Europe*, pp. 506-507, 2001

★ 34. G.-R. Lin* and Y.-L. Cheng, “A delay-time tunable mode-locked erbium-doped fiber ring laser system”, *Technical Digest of Conference on Lasers and Electro-Optics Europe*, pp. 245-246, 2001

2000 (SCI: 4)

❖ ★ 33. Gong-Ru Lin* and Yung-Cheng Chang, “Demonstration and Optimization of an Optoelectronic Phase-Locked Phase Shifter for Optical Microwave Signals”, *IEEE Photonics Technology Letters*, Vol. 12, No. 11, pp. 1555-1557, November 2000. 國科會補助編號 NSC 89-2215-E-036-002 2.552

❖ ★ 32. Gong-Ru Lin* and Yung-Chen Chang, “A DC-Voltage-Controlled Phase-Tuning Technology for Optoelectronic Microwave Signals”, *Microwave and Optical Technology Letters*, Vol. 26, No. 2, pp. 98-100, July 2000. 國科會補助編號 NSC 89-2215-E-036-002 0.500

❖ ★ 31. Gong-Ru Lin*, “Optoelectronic Delay-Time Controller for Laser Pulses”, *Optics Letters*, Vol. 25, No. 11, pp. 799-801, June 2000. 國科會補助編號 NSC 89-2215-E-036-002 3.882

❖ ★ 30. Gong-Ru Lin*, and Ci-Ling Pan, “Ultrafast Response of Multi-Energy Proton-Bombarded GaAs photoconductors”, *Optical and Quantum Electronics*, Vol. 32, No. 4-5, pp. 553-571, May 2000. 1.000

- ★ 29. Gong-Ru Lin* and Jui-Lin Chang, "Transmission Line Measurement of Gold Contact on the Arsenic-Ion-Implanted GaAs After Rapid Thermal Annealing", *Proceedings of SPIE*, Vol. 4227, pp. 29-34, November 2000. 國科會補助編號 NSC 89-2215-E-036-002
 - ★ 28. Gong-Ru Lin* and Yung-Cheng Chang, "Optoelectronic Frequency Discriminated Phase Tuning Technology and Its Applications", *Proceedings of SPIE*, Vol. 4078, pp. 712-723, July 2000. 國科會補助編號 NSC 89-2215-E-036-002
 - ★ 27. Gong-Ru Lin* and Yung-Cheng Chang, "Novel optoelectronic sampling technique by using a delay-time tunable ultrafast laser diode", *Asia-Pacific Microwave Conference (APMC) Proceedings*, p. 15, 2000
 - ★ 26. Gong-Ru Lin* and Yung-Cheng Chang, "Novel electro-optic sampling system by using delay-time tunable pulsed laser sources", *Conference Proceedings - Lasers and Electro-Optics Society Annual Meeting-LEOS*, Vol. 1, p 43-44, 2000.
 - ★ 25. Ci-Ling Pan, Tze-An Liu, Gong-Ru Lin*, and Masahiko Tani, "Multi-energy arsenic-ion-implanted GaAs photoconductors for ultrafast switching and THz generation", *Lasers and Electro-Optics Society 2000 Annual Meeting (LEOS 2000)*, Vol. 1, p 179-180, November 2000.
 - ★ 24. Gong-Ru Lin*, Chin-Chia Hsu, and Ci-Ling Pan, "Ultrafast Multi-Energy Hydrogen-Implanted GaAs Photoconductive Switches", *Journal of the Vacuum Society of R.O.C.*, Vol. 13, No. 2, pp. 29-40, July 2000.
 - ★ 23. Gong-Ru Lin*, Chin-Chia Hsu, and Ci-Ling Pan, "The Absorption Spectrum of Arsenic-ion-implanted GaAs after Thermal Annealing", *Journal of the Vacuum Society of R.O.C.*, Vol. 13, No. 2, pp. 41-46, July 2000. 國科會補助編號 NSC89-2815-C-036-010-E
- 1999 (SCI: 5)**
- ❖ ★ 22. Gong-Ru Lin*, "Dynamical Mapping and End-Point Detection of Photoresist Development by Using Plastic-Fiber-Bundle Probe Array", *IEEE Transactions on Instrumentation and Measurements*, Vol. 48, No. 6, pp. 1319-1323, December 1999. 0.703
 - ❖ ★ 21. J. H. Horng, Gong-Ru Lin*, and C. W. Chen, "Real-Time and Multi-point Monitoring the Dissolution Rate of Photoresist Film by Using a Novel Plastic Fiber Bundle", *Review of Scientific Instruments*, Vol. 70, No. 2, pp. 1518-1521, February 1999. 1.343
 - ❖ ★ 20. Gong-Ru Lin*, "A Plastic-Fiber-Bundle-Based Metrology for Two-Dimension Mapping the Dissolution Rate of Photoresist Film", in *Optical Engineering for Sensing and Nanotechnology*, I. Yamaguchi Ed., *Proceedings of SPIE*, Vol. 3740, pp. 164-168, June 1999. 0.028
 - ❖ ★ 19. Gong-Ru Lin*, Tze-An Liu, Ci-Ling Pan, "Correlation of Carrier Lifetimes and Arsenic-Antisite Defects in LT-GaAs Grown at Different Substrate Temperature", in *"Ultrafast Phenomenon in Semiconductors III"*, R. T. Tsen, Ed., *Proceedings of SPIE*, Vol. 3624, pp. 50-56, January 1999. 0.028
 - ❖ ★ 18. Gong-Ru Lin and Ci-Ling Pan, "Effect of Thermal Annealing on Band Edge Absorption Spectrum of Arsenic-Ion-Implanted GaAs", in *"Photodetectors: Materials and Devices IV"*, G. J. Brown, Ed., *Proceedings of SPIE*, Vol. 3629, pp. 400-408, January 1999. 0.028
 - ★ 17. Gong-Ru Lin and Ci-Ling Pan*, "Effect of proton implantation on optically excited terahertz radiation from GaAs", *Quantum Electronics and Laser Science Conference 1999 (QELS'99) Proceedings*, JThA6, pp. 172-173, May 1999.
- 1998 (SCI: 3)**
- ❖ ★ 16. Gong-Ru Lin, Tzung-Shi Hwang, Y.-H. Chuang, S.-C. Wang, and Ci-Ling Pan*, "Broad-Band (≥ 20 GHz) Laser-Diode-Based Optoelectronic Microwave Phase Shifter", *IEEE Transactions on Microwave Theory and Techniques*, Vol. 46, No. 10, pp. 1419-1426, October 1998. 1.584
 - ❖ ★ 15. Gong-Ru Lin, Wen-Chung Chen, C.-S. Chang, Shyh-Chin Chao, Kaung-Hsiung Wu, T. M. Hsu, W. C. Lee, and Ci-Ling Pan, "Material and Ultrafast Optoelectronic Properties of Furnace-Annealed Arsenic-Ion-Implanted GaAs", *IEEE Journal of Quantum Electronics*, Vol. 34, No. 9, pp. 1740-1748, September 1998. 3.675
 - ❖ ★ 14. Ci-Ling Pan and Gong-Ru Lin, "Arsenic-Implanted GaAs: An Alternative Material to Low-Temperature-Grown GaAs for Ultrafast Optoelectronic Applications", in *"Ultrafast Phenomena in Semiconductors II"*, Kong-Thon F. Tsen; Harold R. Fetterman; Eds., *Proceedings of SPIE*, Vol. 3277, pp. 170-178, January 1998. 0.028

1997 (SCI: 2)

- ❖ ★ 13. Ci-Ling Pan, Gong-Ru Lin, Jia-Min Shieh, Chia-Wen Tsai, S.-C. Wang, and Hsiao-Hua Wu, "Electro-Optic Characterization of Microwave Standing Waves in a GaAs Transmission Line by Using a Novel Phase Analyzing Technique", *International Journal of High-speed Electronics and Systems*, Vol. 8, No. 4, pp. 719-732, April 1997.
- ❖ ★ 12. Gong-Ru Lin and Ci-Ling Pan, "Picosecond Responses of Low-Dosage Arsenic-ion-implanted GaAs Photoconductors", *Applied Physics Letters*, Vol. 71, No. 20, pp. 2901-2903, November 1997. 4.308
- 11. Gong-Ru Lin and Ci-Ling Pan, "砷離子佈植砷化鎵超快光導開關性能之研究", *Electronics Spectrum*, Vol. 3, No. 3, pp. 11-19, December 1997.

1996 (SCI: 3)

- ❖ ★ 10. Gong-Ru Lin, Feruz Ganikhanov, Wen-Chung Chen, C.-S. Chang, and Ci-Ling Pan, "Effect of Rapid Thermal Annealing on Structure and Carrier Lifetime of arsenic-ion-implanted GaAs", *Applied Physics Letters*, Vol. 69, No. 7, pp. 996-998, August 1996. 4.308
- ❖ ★ 9. A. Chin, W. J. Chen, F. Ganikhanov, G.-R. Lin, J.-M. Shieh, C.-L. Pan, and K. C. Hsieh, "Microstructure and Subpicosecond photoresponse in GaAs grown by molecular beam epitaxy at very low temperatures", *Applied Physics Letters*, Vol. 69, No. 3, pp. 397-399, July 1996. 4.308
- ❖ ★ 8. Wen-Chung Chen, Gong-Ru Lin, and C.-S. Chang, "The Dynamics of Thermal Annealing in Arsenic-Ion-Implanted GaAs", *Japanese Journal of Applied Physics*, Vol. 35, Pt. 2, No.2B, pp. L192-L194, February 1996. 1.171

1995 (SCI: 3)

- ❖ ★ 7. Feruz Ganikhanov, Gong-Ru Lin, and Ci-Ling Pan, "Subpicosecond carrier lifetimes in arsenic-ion-implanted GaAs", *Applied Physics Letters*, Vol. 67, No. 23, pp. 3465-3467, December 1995. 4.308
- ❖ ★ 6. Gong-Ru Lin, Chien-Rong Yang, and Ci-Ling Pan, "Laser-Diode-Based Optoelectronic Subharmonic Phase-Locked Loop", *IEEE Microwave and Guided Wave Letters*, Vol. 5, No. 10, pp. 335-337, October 1995. 1.457
- ❖ ★ 5. Hsiao-Hua Wu, Gong-Ru Lin, and Ci-Ling Pan, "Optoelectronic Phase Tracking and Electrooptic Sampling of Free-Running Microwave Signals up to 20 GHz in a Laser-Diode-Based System", *IEEE Photonics Technology Letters*, Vol. 7, No. 6, pp. 670-672, June 1995. 2.552
- 4. Wen-Chung Chen* and Gong-Ru Lin, "淺談砷離子佈植於砷化鎵之研究", 物理雙月刊, Vol. 17, No. 6, pp. 659-662, December 1995.

1994 (SCI: 3)

- ❖ ★ 3. Gong-Ru Lin, Wen-Chung Chen, C.-S. Chang, and Ci-Ling Pan, "Electrical Characterization of Arsenic-Ion-Implanted Semi-Insulating GaAs by Current-Voltage Measurement", *Applied Physics Letters*, Vol. 65, No. 25, pp. 3272-3274, December 1994. 4.308
- ❖ ★ 2. Hsiao-Hua Wu, Chi-Luen Wang, Gong-Ru Lin, C.-S. Chang, and Ci-Ling Pan*, "Optoelectronic Phase-Tracking and Waveform Display of Microwave Signals up to 8 GHz Using Gain-Switched Laser Diodes", *Japanese Journal of Applied Physics*, Vol. 33, Pt. 2, No. 5B, pp. L760-L762, May 1994. 1.171
- ❖ ★ 1. Ci-Ling Pan, Gong-Ru Lin, Dean-Yu Chyou, and Hsiao-Hua Wu, "Electrooptic Phase Tracking of Microwave Signals beyond 18.5 GHz Using an Integrated Electrooptic Modulator as an Optoelectronic Harmonic Mixer in a Phase Lock Loop", *IEEE Microwave and Guided Wave Letters*, Vol. 4, No. 4, pp. 115-117, April 1994. 1.457

(B)會議論文

邀請演講 (Invited Talks) (23+)

- 25. Yung-Hsiang Lin and Gong-Ru Lin*, "Short-Pulse Fiber Lasers Mode Locked by Various Nano-Carbon Materials", *Asia Communications and Photonics Conference 2014 (ACP 2014)*, Invited Talk, Shanghai, China, November 11-14, 2014.
- 24. Gong-Ru Lin* and Yu-Chieh Chi, "Application of 40-GHz Optoelectronic Oscillator in Bidirectional PSK/OOK Transmission", *Asia Communications and Photonics Conference 2014 (ACP 2014)*, Workshop,

- Shanghai, China, November 11-14, 2014.
23. Gong-Ru Lin*, "Graphite and Charcoal Nano-Particles Induced Saturable Absorption for Passively Mode-Locking the Erbium Doped Fiber Lasers", *Photonics Global Conference 2012*, Invited Talk, Singapore, Dec. 13-16, 2012.
 22. Gong-Ru Lin*, "Optical Haze and Depolarization of Si nanorod array for Photonics Applications", *2nd Annual World Congress of Nano-S&T (Nano S&T-2012)*, Invited Talk, Qingdao, China, Oct. 26-28, 2012.
 21. Gong-Ru Lin*, "Nanoscale Graphite and Charcoal Passively Mode-Locked Er-doped Fiber Laser", *International Symposium on Physics and Applications of Laser Dynamics 2012 (IS-PALD 2012)*, Invited Talk, Tainan, Taiwan, Nov. 7-9, 2012.
 20. Gong-Ru Lin*, "Graphite Mode-Locked Fiber Lasers", *2012 First SDU-NSYSU Workshop on Optoelectronic and Material Science*, Invited Talk, Sandong, China, Sep. 13-14, 2012
 19. Gong-Ru Lin*, "Weak-Resonant-Cavity Laser Diode Based Wavelength Injection-Locked Transmitter", *2011 International Photonics Conference (IPC2011)*, Invited Talk, Tainan, Taiwan, Dec. 8-10, 2011.
 18. Gong-Ru Lin*, Yu-Sheng Liao, and Yu-Chieh Chi, "Applications of Weak-Resonant-Cavity Laser Diodes in NRZ/RZ DWDM-PON System", *16th Opto-Electronics and Communications Conferences (OECC2011)*, Invited Talk, NSYSU, Kaohsiung, Taiwan, Jul. 4-8, 2011.
 17. Chih-Hsien Cheng and Gong-Ru Lin*, "Nanocrystalline Si embedded semi-insulating a-Si:H film grown by Low-Temperature PECVD with He carried SiH₄", *2011 AVS International Plasma Workshop: Processing and Characterization of Advanced Materials (2011 AVS-IPW)*, Invited Talk, Taipei, Taiwan, Mar. 22-25, 2011.
 16. Gong-Ru Lin*, "DWDM Channelized Pulsed Carrier Generated from Optical Injection Mode-Locked Weak-Resonant Laser Diode Based Fiber Ring Laser System", *International Conference on Materials for Advanced Technologies 2009 (ICMAT)*, Symposium P: Optical Fiber Devices and Applications, Invited Talk, 28 June - 3 July 2009, Singapore.
 15. H.-L. Wang, Y.-H. Huang, G.-C. Lin, S.-C. Ko, J.-W. Liaw, and Gong-Ru Lin*, "Key Issues in WDM-PON Technology," Invited Talk, 2008 *International Symposium on Technologies for High-Capacity Optical Communications (ISTHCOC 2008)*, NSYSU, Kaohsiung, Taiwan, Nov. 19, 2008.
 14. Gong-Ru Lin*, "Optical injection mode-locking and DWDM channeling characteristics of weak-resonant-cavity FPLD-based fiber ring lasers", *2008 Asia-Pacific Optical and Wireless Communications Conference and Exhibition (APOC 2008)*, Invited Talk, Hangzhou, China, October 29, 2008.
 13. Gong-Ru Lin*, "Enabling Microwatt power emission with Si nanocrystals based LED", *2007 International Workshop on Applied Optics and Nanophotonics (IWAON2007)*, Invited Talk, National Chung Hsing University, Taichung, Taiwan, Nov. 29-Dec. 1, 2007.
 12. Gong-Ru Lin*, "Nanocrystallite Si Based MOS light Emitting Diodes", *4th U.S. Air Force-Taiwan Nanoscience Initiative Workshop*, Invited Talk, Houston TX, USA, February 8-9, 2007.
 11. Gong-Ru Lin*, "Semiconductor Laser and Amplifier Based 10 Gbit/s All Optical NRZ-to-RZ Data Format Converter", *2007 Symposium on Electro-Optical Engineering*, Invited Talk, National Taipei University of Technology, Taipei, Taiwan, July 6, 2007.
 10. Gong-Ru Lin* and Chun-Jung Lin, "Silicon Nanocrystal Based MOSLED on Silicon Nanopillar Array", *7th IEEE International Conference on Nanotechnology (IEEE-NANO2007)*, Invited Talk, Invited Session: Nano-Photonics, Nano-Optics and Opto-Electronics (2F2), Hong Kong, China, Aug. 2-5, 2007.
 9. Gong-Ru Lin*, "Enhanced Electroluminescence from Nanocrystallite Si Based MOSLED by Interfacial Si Nanopyramids", *OSA Topical Conference on Nanophotonics (NANO2007)*, Invited Talk, Hangzhou, China, June 18-21, 2007.
 - * 8. Gong-Ru Lin*, "All-Optical 10Gbit/s Data Format Conversion in Temporally Gain Shaped Semiconductor Optical Amplifier Based", *2007 International Symposium on Next-Generation Lightwave Communications*, Invited Talk, Chinese University of Hong Kong (CUHK), Hong Kong, June 11-13, 2007.
 7. Gong-Ru Lin*, "All-in-one Amplified Compressor for Sub-50fs Soliton Generation from Mode-Locked Fiber Lasers", *2007 Asia-Pacific Microwave Photonics Conference (AP-MWP 2007)*, Invited Talk, Jeju Island, Korea, April 25-27, 2007
 6. Gong-Ru Lin*, "Nanocrystallite Si Based MOS light Emitting Diodes", *4th U.S. Air Force-Taiwan*

- Nanoscience Initiative Workshop*, Invited Talk, Houston TX, USA, February 8-9, 2007.
- ★ 5. Gong-Ru Lin*, “Nanocrystallite Si Photonics”, *2006 First NTU-LAAS Joint Workshop on Micro/Nano Systems (NTU-LAAS WMNS 2006)*, Invited Talk, Taipei, Taiwan, Nov. 13, 2006.
 - ★ 4. Gong-Ru Lin*, “All-Optical NRZ-to-RZ Data Format Conversion with Optically Injected Laser Diodes or Semiconductor Optical Amplifiers”, *2006 Asia-Pacific Optical and Wireless Communications Conference and Exhibition (APOC 2006)*, Invited Talk, Gwangju Korea, September 3-7, 2006.
 - ★ 3. Gong-Ru Lin*, “White-light and near-infrared electroluminescence of furnace or CO₂ laser annealed Si-rich SiO₂ with structural defects and Si nanocrystals”, *2006 SPIE Symposium on Photonics Europe (PE 2006)*, Invited Talk, paper 6195-32, Strasbourg, France, April 3-6, 2006.
 - 2. Gong-Ru Lin*, “Retrospect on the Research of Silicon Nanocrystal Embedded Silicon Oxide Materials and Light-Emitting Devices in NCTU/IEO”, *3rd Symposium on Nanophotonics Science and Technology*, Invited Talk, Hualian, Taiwan, September 13-17, 2005
 - ★ 1. Gong-Ru Lin* and Yu-Sheng Liao, “A Synchronous Modulation and Inter-Mixing Technique for Sensitivity and Error-Rate Analysis of Sonet PIN-TIA”, *2003 Asia-Pacific Optical and Wireless Communications Conference and Exhibition (APOC 2003)*, Invited Talk, Session SC1, Wuhan, China, November 2-6, 2003.

國際學術會議 (250+)

2015

- 292. Chung-Yu Lin, Yu-Chieh Chi, Cheng-Ting Tsai, and Gong-Ru Lin*, “Tunable Dual-Mode Colorless Laser Diode via Frequency-Doubling Modulated Carrier Injection for OFDM-PON,” *Conference on Lasers and Electro-Optics (CLEO 2015)*, In preparation, San Jose, CA, USA, May 10-15, 2015.
- 291. Yu-Chieh Chi, Chung-Yu Lin, Min-Chi Cheng, Cheng-Ting Tsai, and Gong-Ru Lin*, “42-Gbit/s directly modulated 64-QAM OFDM with TO-can packaged colorless laser diode,” *Optical Fiber Communication Conference and Exhibit (2015 OFC/NFOEC Meeting)*, Submitted, Los Angeles, California, USA, March 22-26, 2015.
- 290. Cheng-Ting Tsai, Yu-Chieh Chi, and Gong-Ru Lin*, “A colorless laser diode with reduced frequency chirp for 256-QAM OFDM modulation for 40-Gbit/s transmission,” *Optical Fiber Communication Conference and Exhibit (2015 OFC/NFOEC Meeting)*, Submitted, Los Angeles, California, USA, March 22-26, 2015.
- 289. Huai-Yung Wang, Yu-Chieh Chi, Cheng-Ting Tsai, and Gong-Ru Lin*, “64-QAM OFDM-RoF Transmission by a Directly Modulated Colorless Laser Diode with Dual-Modes Injection,” *Optical Fiber Communication Conference and Exhibit (2015 OFC/NFOEC Meeting)*, Submitted, Los Angeles, California, USA, March 22-26, 2015.

2014

- 288. Jui-Yung Lo, Yung-Hsiang Lin, Ting-Hui Chen, Zhe-Chuan Feng, and Gong-Ru Lin*, “Passive mode-locking of erbium doped fiber laser with nano-scale carbon black based saturable absorber,” *Asia Communications and Photonics Conference 2014 (ACP 2014)*, Oral paper AF1C.5, Shanghai, China, November 11-14, 2014.
- 287. Chi-Cheng Yang, Sheng-Fong Lin, and Gong-Ru Lin*, “Filter Shape and Birefringence Detuned Dual-Band Mode Lockable Er-Doped Fiber Laser with Flexible Wavelengths,” *Asia Communications and Photonics Conference 2014 (ACP 2014)*, Oral paper AF2C.3, Shanghai, China, November 11-14, 2014.
- 286. Hsiang-Yu Chen, Yu-Chuan Su, Yu-Chieh Chi, and Gong-Ru Lin*, “A Self-feedback Colorless Fabry-Perot Laser Diode for 5 Gbit/s DWDM-PON,” *Asia Communications and Photonics Conference 2014 (ACP 2014)*, Oral paper AF2B.6, Shanghai, China, November 11-14, 2014.
- 285. Chung-Yu Lin, Min-Chi Cheng, Cheng-Ting Tsai, Yu-Chieh Chi, and Gong-Ru Lin*, “Master-to-slave injection-locked WRC-FPLD for Multi-QAM-OFDM transmission,” *2014 International Topical Meeting on Microwave Photonics / The 9th Asia-Pacific Microwave Photonics Conference (MWP/APMP 2014)*, Poster paper TuEG-4, Sapporo, Japan, October 20-23, 2014.
- 284. Cheng-Ting Tsai, Min-Chi Cheng, Yu-Chieh Chi, Chung-Yu Lin and Gong-Ru Lin*, “A Directly Modulated Colorless Laser Diode for the M-ary-QAM OFDM Transmission,” *Asia Communications and Photonics Conference 2014 (ACP 2014)*, Oral paper AW3A.5, Shanghai, China, November 11-14, 2014.
- 283. Yu-Chieh Chi and Gong-Ru Lin*, “Designing a 850-μm Long-cavity Colorless Laser Diode for RZ DWDM-PON with 50-GHz Channelization at 10 Gbit/s,” *Asia Communications and Photonics Conference*

- 2014 (ACP 2014), Poster paper AT3A.105, Shanghai, China, November 11-14, 2014.
282. Yu-Chieh Chi, Yi-Cheng Li, Cheng-Ting Tsai, Min-Chi Cheng, and Gong-Ru Lin*, "Full-duplex 64-QAM-OFDM at 18 Gbit/s with colorless FPLD injection-locked by reusing DFBLD/EAM carrier," *Asia Communications and Photonics Conference 2014 (ACP 2014)*, Poster paper AT3A.33, Shanghai, China, November 11-14, 2014.
 281. Yu-Chieh Chi and Gong-Ru Lin*, "Self-pulsated hybrid 40-Gbit/s BPSK-OOK Transmission," *2014 International Topical Meeting on Microwave Photonics / The 9th Asia-Pacific Microwave Photonics Conference (MWP/APMP 2014)*, Poster paper TuEG-3, Sapporo, Japan, October 20-23, 2014.
 280. Yung-Hsiang Lin, Chun-Yu Yang, Chung-Lun Wu, Hung-Kuei Tsai, Din-Ping Tsai, and Gong-Ru Lin*, "Sub-picosecond fiber lasers mode-locked by electrochemically exfoliated few-layer graphene nano-sheets from graphite foil," *The 6th International Conference on Recent Progress on Graphene Research*, Oral paper, DA-058, Taipei, Taiwan, Sep. 21-25, 2014.
 279. Sheng-Pin Su, Chung-Lun Wu and Gong-Ru Lin*, "Modulation Depth Enhancement in Si Quantum Dot Doped SiO_x Waveguide Based Free-Carrier Modulator by Adding a Ring Resonator," *The 11th IEEE International Conference on Group IV Photonics (GFP)*, Poster paper, Paris, France, August 27-29, 2014.
 278. Yu-Chieh Chi and Gong-Ru Lin*, "Simulated optimization of the colorless laser transmitter under 10-Gbit/s direct encoding and optical injection-locking," *The 35th Progress In Electromagnetics Research Symposium (PIERS 2014)*, Oral paper 1913, Guangzhou (Canton), China, Aug. 25-28, 2014.
 277. Yu-Chuan Su, Yu-Chieh Chi and Gong-Ru Lin*, "A remote-free self-feedback colorless FPLD with FBG based single-mode filter for multi-channel 2.5 Gbit/s DWDM-PON," *conference on Lasers and Electro-Optics: 2014 (CLEO 2014)*, Poster paper, JT4A.57, San Jose, CA, USA, June 8-13, 2014.
 276. Chih-Hsin Cheng and Gong-Ru Lin*, "Low-temperature PECVD grown Carbon-rich Silicon Carbide Saturable Absorber for Sub-picosecond Passively Mode-locked Fiber Lasers," *Conference on Lasers and Electro-Optics: 2014 (CLEO 2014)*, Oral paper, STu1N.5, San Jose, CA, USA, June 8-13, 2014.
 275. Chung-Lun Wu, Sheng-Pin Su, and Gong-Ru Lin*, "Effect of Quantum Confinement in Si-QD on Free-Carrier Modulation Bandwidth and Cross-Section of the SiO_x:Si-QD Waveguide," *Conference on Lasers and Electro-Optics: 2014 (CLEO 2014)*, Poster paper, JW2A.48, San Jose, CA, USA, June 10-12, 2014.
 274. Min-Chi Cheng, Cheng-Ting Tsai and Gong-Ru Lin*, "Master-to-slave injection-locked WRC-FPLD pair with 16 DWDM-PON channels for 16-QAM OFDM transmission," *Optical Fiber Communication Conference and Exhibit (2013 OFC/NFOEC Meeting)*, oral paper Tu2F.6, San Francisco, CA, USA, March 9-13, 2014.
 273. Cheng-Ting Tsai, Min-Chi Cheng and Gong-Ru Lin*, "Pre-amplified 64-QAM-OFDM modulation of a colorless laser diode for 30 Gbit/s transmission with enhanced SNR," *Optical Fiber Communication Conference and Exhibit (2013 OFC/NFOEC Meeting)*, oral paper Tu2G.5, San Francisco, CA, USA, March 9-13, 2014.
- 2013**
272. Huai-Yung Wang, Yu-Chieh Chi, and Gong-Ru Lin*, "40-Gbit/s self-started pulsed RZ-BPSK data transmission using DFBLD externally pulsed with a self-feedback loop," *Asia-Pacific Microwave Photonics Conference 2012 (APMP2013)*, oral paper MD-4, Gwangju, Korea, April 22-24, 2013.
 271. Chung-Lun Wu, Sheng-Pin Su and Gong-Ru Lin*, "Free-carrier density dependent relaxation lifetime in Si quantum dot optical absorption modulator," *The 10th IEEE International Conference on Group IV Photonics (GFP)*, Poster paper pp. 47 - 48, Seoul, Korea, August 28-30, 2013.
 270. Ling-Hsuan Tsai, Chih-Hsien Cheng, and Gong-Ru Lin*, "High absorption and low resistivity non-stoichiometric Si-rich SiC film as the intrinsic absorber layer in dual-junction p-i-n thin film" *28th European PV Solar Energy Conference and Exhibition (EU PVSEC 2013)*, Poster paper 3CV.1.9, Parc des Exposition Paris Nord Villepinte, Paris, France, Sep. 30- Oct. 4, 2013.
 269. Chih-Hsien Cheng, Ling-Hsuan Tsai, and Gong-Ru Lin*, "The Si-rich SiC and amorphous-Si based p-i-n tandem PVSC with conversion efficiency of 6% by detuning the excessive Si composition" *28th European PV Solar Energy Conference and Exhibition (EU PVSEC 2013)*, Poster paper 3CV. 1.11, Parc des Exposition Paris Nord Villepinte, Paris, France, Sep. 30- Oct. 4, 2013.
 268. Chih-Hsien Cheng, Ling-Hsuan Tsai, and Gong-Ru Lin*, "All silicon carbide based p-i-n photovoltaic solar cells with conversion efficiency enhanced by detuning the composition ratio of i-Si_xC_{1-x} layer" *39th IEEE Photovoltaic Specialists Conference (PVSC 2013)*, Poster paper #242, Tampa, Florida, USA, June 16-21, 2013.

267. Yung-Hsiang Lin, and Gong-Ru Lin*, "Directly imprinted graphite nano-particle with improved quality for sub-400 fs passively mode-locked fiber laser," *Conference on Lasers and Electro-Optics: 2013 (CLEO 2013)*, Oral paper, 1656879, San Jose, CA, USA, June 9-14, 2013.
 266. Huai-Yung Wang, Yu-Chieh Chi, and Gong-Ru Lin*, "40-Gbit/s RZ-BPSK and reused RZ-OOK bi-directional transmission with a self-pulsated modulator" *Conference on Lasers and Electro-Optics: 2013 (CLEO 2013)*, oral, 1657354, San Jose, CA, USA, June 9-14, 2013.
 265. Yi-Cheng Li, Yu-Chieh Chi, Min-Chi Cheng, and Gong-Ru Lin*, "Injection-locked WRC-FPLD for optical 16-QAM OFDM Transmission at 12 Gbit/s," *Conference on Lasers and Electro-Optics: 2013 (CLEO 2013)*, oral CTu2J.4, San Jose, CA, USA, June 9-14, 2013.
 264. Yung-Hsiang Lin, and Gong-Ru Lin*, "Directly imprinted graphite nano-particle with improved quality for sub-400 fs passively mode-locked fiber laser," *Conference on Lasers and Electro-Optics: 2013 (CLEO 2013)*, Oral paper, 1656879, San Jose, CA, USA, June 9-14, 2013.
 263. Cheng-Ting Tsai, Yi-Cheng Lee, and Gong-Ru Lin*, "The Hybrid Mode-Locking and Competition Mechanisms in Directly-Modulated Weak-Resonant-Cavity Fabry-Perot Laser Diode with Self-Feedback Fiber Ring," *2013 Asia-Pacific Radio Science Conference. (AP-RASC 2013)*, Oral paper, 290159, Howard International House, Taipei, Taiwan, September 3-7, 2013.
 262. Jui-Yung Lo, Kuang-Nan Cheng, Yung-Hsiang Lin and Gong-Ru Lin*, "Thinning the SWCNT Doped PVA Film for Improved Passive Mode-Locking of Fiber Laser," *Conference on Lasers and Electro-Optics Pacific Rim, and OptoElectronics and Communications Conference / Photonics in Switching 2013 (CLEO-PR & OECC/PS 2013)*, Poster paper, 1569724785, Kyoto, Japan, Jun 30-July 4, 2013.
 261. Cheng-Ting Tsai, Yi-Cheng Lee, and Gong-Ru Lin*, "Chirp Control of 10-GHz Harmonic Mode-Locked Weak-Resonant-Cavity Fabry-Perot Laser Diode with Reduced End-Facet Reflectance," *The 10th Conference on Lasers and Electro-Optics Pacific Rim, and The 18th OptoElectronics and Communications Conference / Photonics in Switching 2013. (CLEO-PR 2013)*, Poster paper, 1569724751, Kyoto International Conference Center, Kyoto, Japan, June 30-July 4, 2013.
 260. Yu-Chuan Su, Shih-Ying Lin, Yi-Cheng Li, Zhi-Wang Liao, Hai-Lin Wang, Gong-Cheng Lin, and Gong-Ru Lin* "Effect of Injection Coherence on OOK/OFDM Transmission with Long-Cavity Colorless Laser Diode" *Asia-Pacific Microwave Photonics Conference 2012 (APMP2013)*, oral paper MC-3, Gwangju, Korea, April 22-24, 2012.
 259. Huai-Yung Wang, Yu-Chieh Chi, and Gong-Ru Lin* "40-Gbit/s self-started pulsed RZ-BPSK data transmission using DFBLD externally pulsed with a self-feedback loop" *Asia-Pacific Microwave Photonics Conference 2012 (APMP2013)*, oral paper MD-4, Gwangju, Korea, April 22-24, 2012.
 258. Chun-Wei Tseng, and Gong-Ru Lin* "Porous Alumina Thin-film on Si-Wafer with Geometric Scale Dependent Anti-Reflectance and Depolarization," *2013 Material Research Society Fall Meeting 2013 (MRS Spring 2013)*, Poster paper, San Francisco, CA, USA, April 1-5, 2013.
 257. Ling-Hsuan Tsai, Chun-Jung Lin, Gon-Ru Lin*, "Effect of Off-Angle RF Sputtering Deposited Nano-Porous SnS Film on Anodic Aluminum Oxide," *2013 Material Research Society Fall Meeting 2013 (MRS Spring 2013)*, Oral paper, San Francisco, CA, USA, April 1-5, 2013.
 256. Chun-Yu Yang, Yung-Hsiang Lin, Chung-Lun Wu, and Gong-Ru Lin*, "Electrochemically exfoliated graphite nano-sheet mode-locker for sub-picosecond L-band fiber lasers," *Conference on Lasers and Electro-Optics: 2013 (CLEO 2013)*, Poster JTU4A.22, San Jose, CA, USA, June 9-14, 2013.
 255. Shih-Ying Lin, Yu-Chieh Chi, and Gong-Ru Lin*, "Over bandwidth OC-192 NRZ modulation of TO-can weak-resonant-cavity Fabry-Perot laser diode for DWDM-PON," *Optical Fiber Communication Conference and Exhibit (2013 OFC/NFOEC Meeting)*, Oral OW1A.4, Anaheim, CA, USA, March 17-21, 2013.
 254. Min-Chi Cheng, Yi-Cheng Li, Shih-Ying Lin, Yu-Chieh Chi, and Gong-Ru Lin*, "Directly modulating a long-resonant-cavity laser diode at limited bandwidth of 5 GHz with pre-leveled 16-QAM OFDM transmission at 20-Gbit/s," *Optical Fiber Communication Conference and Exhibit (2013 OFC/NFOEC Meeting)*, Oral OW3B.7, Anaheim, CA, USA, March 17-21, 2013.
 253. I-Cheng Lu, Hsing-Yu Chen, Chia-Chien Wei, Yu-Chieh Chi, Yi-Cheng Li, DarZu Hsu, Gong-Ru Lin, and Jyehong Chen, "20-Gbps WDM-PON Transmissions Employing Weak-resonant-cavity FPLD with OFDM and SC-FDE Modulation Formats," *Optical Fiber Communication Conference and Exhibit (2013 OFC/NFOEC Meeting)*, Poster Session II JTh2A.70, Anaheim, CA, USA, March 17-21, 2013.
- 2012**
252. Chih-Hsien Cheng, Yu-Chung Lien, and Gong-Ru Lin*, "Plasma Power Detuned Synthesis of Si-QD doped Si-rich SiO_x Thin Film for Multicolor Electroluminescent Diodes," *Asia Communications and Photonics*

- Conference and Exhibition (ACP 2012)*, oral paper, 1431899, Guangzhou, China, Nov. 7-10, 2012.
251. Chung-Lun Wu, and Gong-Ru Lin*, "Luminescent mechanisms of Si-rich SiO_x analyzed by full-band time-resolved photoluminescence," *Asia Communications and Photonics Conference and Exhibition (ACP 2012)*, oral paper, 1432217, Guangzhou, China, Nov. 7-10, 2012.
 250. Kaung-Jay Peng, Chung-Lun Wu, and Gong-Ru Lin*, "Synthesis of few-layer graphene in hydrogen-free PECVD with low-temperature and low plasma power," *2012 Material Research Society Fall Meeting 2012 (MRS Fall 2012)*, Poster paper, 1437755, Boston, USA, Nov. 25-30, 2012.
 249. Gong-Ru Lin*, Chun-Yu Yang, Ling-Hsuan Tsai, Chung-Lun Wu, "Suppressed Oxidation of Graphene Sheets with Low-bias Electrochemical Exfoliation," *2012 Material Research Society Fall Meeting 2012 (MRS Fall 2012)*, Poster paper, 1437870, Boston, USA, Nov. 25-30, 2012.
 248. Chung-Lun Wu, and Gong-Ru Lin*, "Si-ncs size distribution induced inhomogeneous linewidth broadening and lifetime dispersion," *The 9th IEEE International Conference on Group IV Photonics (GFP)*, Poster paper WP 25, San Diego, CA, USA, Aug. 29-31, 2012.
 247. Shih-Ying Lin, Yu-Chieh Chi, Zhi-Wang Liao, Hai-Lin Wang, Gong-Cheng Lin, and Gong-Ru Lin*, "WDM-PON Transmission Using WRC-FPLDs with AR Coating Reflectance of 0.5% and 1.2%," *17th Opto-Electronics and Communications Conference (OECC2012)*, Oral paper SC4_1033, Busan Korea, July 2-6, 2012.
 246. Ling-Hsuan Tsai, Hung-Yu Tai, Chung-Lun Wu, and Gong-Ru Lin*, "Enhanced Si Quantum Dot Luminescence in Si-rich SiC Thin-Film Light Emitting Diode" *17th Opto-Electronics and Communications Conference (OECC2012)*, Oral paper, Busan Korea, July 2-6, 2012.
 245. Yi-Cheng Li, Yu-Chieh Chi, and Gong-Ru Lin, "Specific SMA connected TO-can FPLD package for 6-GHz 256-QAM direct modulation", *Asia-Pacific Microwave Photonics Conference (APMP) 2012*, oral paper WS-6, Kyoto, Japan, April 25-27, 2012.
 244. Yu-Chieh Chi, Chun-Ju Lin, and Gong-Ru Lin*, "Polarization Controlled Self-Feedback SOA for Reusing Down-Stream Erased Carrier in Bi-directional WDM-PON", *Asia-Pacific Microwave Photonics Conference (APMP) 2012*, Poster paper PA-20, Kyoto, Japan, Apr. 25-27, 2012.
 243. Yu-Chieh Chi, Peng-Chun Peng, Hai-Han Lu, and Gong-Ru Lin*, "Coherently Injection-Locked Weak-Resonant-Cavity Laser Diode for Optical 16-QAM-OFDM Transmission at 4 Gb/s", *Wireless & Optical Communications Conference 2012 (WOCC2012)*, Poster paper P_19, Kaohsiung, Taiwan, Apr. 19-21, 2012.
 242. Ling-Hsuan Tsai, Chiao-Ti Lee, Yung-Hsiang Lin, and Gong-Ru Lin*, "A Si-rich Si_xC_{1-x} Based p-n Junction photovoltaic Solar Cells" *38th IEEE Photovoltaic Specialists Conference (PVSC 2012)*, Poster paper #343, Austin, Texas, USA, June 3-8, 2012.
 241. Yung-Hsiang Lin and Gong-Ru Lin*, "Passively Mode-Locked Erbium Doped Fiber Ring Laser with Charcoal Nano Particle Saturable Absorber" *Conference on Lasers and Electro-Optics (CLEO/QELS 2012)*, Oral paper 1304607, San Jose, CA, USA, May. 6-11, 2012.
 240. Yung-Hsiang Lin, and Gong-Ru Lin*, "Using Graphite Nano-Particle Doped Thin PVA Film as Saturable Absorber for Passively Mode-Locking Erbium Doped Fiber Ring Laser", *2012 SPIE Photonic Europe*, Oral paper 8433-18, Brussels, Belgium, Apr. 16-19, 2012.
 239. Chih-Hsien Cheng, Yu-Chung Lien, and Gong-Ru Lin*, "Plasma power detuned synthesis of Si-QDs for multi-color electroluminescence with 0.2% quantum efficiency", *2012 Material Research Society Spring Meeting (MRS Spring 2012)*, Oral paper, 1268719, San Francisco, C.A, USA., Apr. 9-13, 2012.
 238. Chih-Hsien Cheng, and Gong-Ru Lin*, "Effect of Oxidation in Nanocrystalline Silicon Grown with He Diluted SiH₄ on Bottom Gate Thin Film Transistor Performance", *2012 Material Research Society Spring Meeting (MRS Spring 2012)*, Poster paper, 1268756, San Francisco, C.A, USA., Apr. 9-13, 2012.
 237. Chung-Lun Wu, and Gong-Ru Lin*, "Size dependent photoluminescence lifetime dispersion of Si Quantum Dots", *2012 Material Research Society Spring Meeting (MRS Spring 2012)*, Poster paper. 1268725, San Francisco, C.A, USA, Apr. 9-13, 2012.
 236. Chun-Wei Tseng, Yi-Hao Pai, and Gong-Ru Lin*, "Surface Morphology Dependent Depolarization Properties of Nano-Porous Alumina", *The 7th Annual IEEE International Conference on Nano/Micro Engineered and Molecular Systems (NEMS 2012)*, Poster paper, 265, Kyoto, Japan, Mar. 05-08, 2012.
 235. Yung-Hsiang Lin and Gong-Ru Lin*, "Electroluminescence of Si Quantum Dots Embedded SiN_x/SiO_x Superlattice", *Taiwan-Japan Nanophotonics and Plasmonic Metamaterials Workshop*, Post paper. C03, Taipei, Taiwan, Jan. 11-12, 2012.
 234. Ling-Hsuan Tsai, Tzu-Chieh Lo, and Gong-Ru Lin*, "Tunable C/Si Composition Induce Si Nanocrystals Self-Assembled in Amorphous Si-rich SiC", *Taiwan-Japan Nanophotonics and Plasmonic Metamaterials*

- Workshop**, Post paper. C51, Taipei, Taiwan, Jan. 11-12, 2012.
233. Chih-Hsien Cheng, and Gong-Ru Lin*, "Nano-crystalline Silicon based Bottom Gate Thin Film Transistor Grown by LTPECVD with Ar diluted SiH₄", *Taiwan-Japan Nanophotonics and Plasmonic Metamaterials Workshop*, Post paper, C12, Taipei, Taiwan, Jan. 11-12, 2012.
- 2011**
232. Chih-Kuo Tseng, Jiun Ru Huang, Hau-Wei Hung, Ting-Hsiao Wu, Gong-Ru Lin*, Jia-Min Shieh, and Ming-Chang Lee, "Resonance-Enhanced Surface Emission of Silicon Nanocrystal by 2nd-order Distribution Feedback Structures", *Conference on Lasers and Electro-Optics Pacific Rim (IQEC/CLEO-PR 2011)*, Sidney, Australia, Aug. 28 – Sep. 1, 2011.
231. Yung-Hsiang Lin, Chung-Lun Wu, Yi-Hao Pai, and Gong-Ru Lin*, "Off-axis luminescent spectral broadening of narrow-band photoemissive SiN_x/SiO_x Bragg mirror," *Conference on Lasers and Electro-Optics Pacific Rim (IQEC/CLEO-PR 2011)*, Poster paper, Sydney, Australian, Aug. 28 – Sep. 1, 2011,
230. Tzu-Chieh Lo, Ling-Hsuan Tsai, Chih-Hsien Cheng, Yi-Hao Pai, Po-Sheng Wang, Chih-I Wu, Gong-Ru Lin*, "Self-Aggregated Si Nanocrystals in Amorphous Si-rich SiC", *24th International Conference on Amorphous and Nanocrystalline Semiconductors (ICANS 24)*, Oral paper, 1256, Nara, Japan, August 21-26, 2011.
229. Hung-Yu Tai, Yung-Hsiang Lin, Gong-Ru Lin*, "Electroluminescence of Si Quantum Dots Embedded SiN_x/SiO_x superlattice", *24th International Conference on Amorphous and Nanocrystalline Semiconductors (ICANS 24)*, Oral paper, 1254, Nara, Japan, August 21-26, 2011.
228. Chun-Chieh Chen, Ling-Hsuan Tsai, Chih-Hsien Cheng, and Gong-Ru Lin*, "Si Nanocrystals Embedded Si-rich Si_xC_{1-x} Lighting Emitting Diodes", *24th International Conference on Amorphous and Nanocrystalline Semiconductors (ICANS 24)*, Oral paper, 1260, Nara, Japan, August 21-26, 2011.
227. Chun-Ju Lin, and Gong-Ru Lin*, "Beyond-Bandwidth Self-Started Mode-Locking WRC-FPLD RZ-OOK Transmitter with Cavity Length Dependent BER", *16th European Conference on Networks and Optical Communications (NOC 2011)*, 1569424911, Northumbria University, Newcastle upon Tyne, UK, July 20-22, 2011.
226. Yu-Chieh Chi and Gong-Ru Lin*, "Self-pulsating EAM triggered Mode-locking of SOA Fiber Laser for Synthesizer-free 10 Gbit/s RZ Data Generators", *16th Opto-Electronics and Communications Conference (OECC2011)*, Poster paper. 7P3-00093, Kaohsiung, Taiwan, July 4-8, 2011.
225. Yi-Cheng Lee, and Gong-Ru Lin*, "Harmonic mode-locking of a strongly self-feedback weak-resonant-cavity laser diode with 10-GHz direct-modulation", *16th Opto-Electronics and Communications Conference (OECC2011)*, Poster paper. 7P3-00077, Kaohsiung, Taiwan, July 4-8, 2011.
224. Jung-Jui Kang, Chao-Kuei Lee, and Gong-Ru Lin*, "40-GHz Photonic Microwave Clock Generated by Fractional Talbot Effect Doubled Optical Pulse Injection and Rational Harmonic Mode-Locking", *16th Opto-Electronics and Communications Conference (OECC2011)*, Poster paper. 7P3-00071, Kaohsiung, Taiwan, July 4-8, 2011.
223. Yu-Chan Lin, Kuang-Nan Cheng and Gong-Ru Lin*, "Passively Harmonic Mode-locking of Fiber Ring Laser using a Carbon-nanotube embedded PVA Saturable Absorber", *16th Opto-Electronics and Communications Conference (OECC2011)*, Oral paper. 8B1_2, Kaohsiung, Taiwan, July 4-8, 2011.
222. Chun-Ju Lin, and Gong-Ru Lin*, "Effect of Self-Feedback Power and Phase-Delay on the Self-Triggered Harmonic Mode-Locking WRC-FPLD Fiber-Ring for RZ Clock and Data Transmission", *16th Opto-Electronics and Communications Conference (OECC2011)*, Poster paper. 7P3-00081, Kaohsiung, Taiwan, July 4-8, 2011.
221. Fan-Shuen Meng, Yi-Hao Pai, Yung-Hsiang Lin, Gong-Ru Lin*, "Nanoscale Teflon Coated Surface Nano-Roughened Si Solar Cells with Teflon Thickness Dependent Efficiency and Hydrophobicity", *37th IEEE Photovoltaic Specialists Conference (PVSC)*, Poster paper, 640, Seattle, USA, June 19-24, 2011.
220. Yung-Hsiang Lin, and Gong-Ru Lin*, "Ewald-Oseen Extinction Modeling on Si Nano-rod Scattering Induced Surface Depolarized Reflection", *Progress In Electromagnetics Research Symposium (PIERS)*, Oral paper. 110215114235, Suzhou, September 12-16, 2011.
219. Yi-Hao Pai and Gong-Ru Lin*, "Crystal Structure Dependent Photoluminescence and Photoconductivity of Spontaneous Electrochemical Synthesized Wurtzite-Type Zinc Oxide", *International conference on materials for advanced Technologies (ICMAT 2011)*, Suntec, Singapore, Jun. 26-Jul. 1, 2011.
218. Yi-Hao Pai, and Gong-Ru Lin*, "Polystyrene Nanospheres Assistant Etching of Tunable Fluorinated Silicon-Dioxide nanorod arrays with Self-Cleaning and Broadband Antireflection", *International conference on materials for advanced Technologies (ICMAT 2011)*, Suntec, Singapore, Jun. 26-Jul. 1,

- 2011.
217. Chung-Lun Wu, Yung-Hsiang Lin, and Gong-Ru Lin*, “Resonant in-situ photoluminescence of Si-QDs buried in SiO_x/SiN_x distributed Bragg reflector”, *Conference on Lasers and Electro-Optics (CLEO/QELS 2010)*, Post paper. JTu115, Baltimore, Maryland, May 1-6, 2011.
 216. Yi-Cheng Lee, and Gong-Ru Lin*, “Transformation of Self-Feedback Weak-Resonant-Cavity Fabry-Perot Laser Diode Pulsation from Gain-Switching to Mode-Locking under Direct Modulation at 10 GHz”, *Conference on Lasers and Electro-Optics (CLEO/QELS 2011)*, Poster paper. 1036428, Baltimore, Maryland, USA, May 1-6, 2011.
 215. Chih-Hsien Cheng, and Gong-Ru Lin*, “Nano-crystalline Silicon Based Bottom Gate Thin Film Transistor Grown by LTPECVD with Ar Diluted SiH₄”, *2011 Material Research Society Spring Meeting (MRS Spring 2011)*, Oral paper. 1011666, San Francisco, CA USA, Apr. 25-29, 2011.
 214. Yi-Hao Pai, Chun-Wei Tseng, and Gong-Ru Lin**, “Nano-Porous Alumina Oxide Thin-film with Pore-Density/Size Dependent Anti-Reflectance at Different Incident Angles”, *2011 Materials Research Society Spring Meeting (2011 MRS Spring Meeting)*, Poster paper, San Francisco, CA, USA, Apr. 25-29, 2011.
 213. Hung-Yu Tai, and Gong-Ru Lin*, “Synthesis of amorphous silicon carbide films embedded with SiC and Si nanocrystals by fluence-ratio detuned PECVD”, *2011 Material Research Society Spring Meeting (MRS Spring 2011)*, Oral paper. 1013367, San Francisco, C.A, USA, Apr. 25-29, 2011.
 212. Chiao-Ti Lee, and Gong-Ru Lin*, “Enhanced Optical Absorption of Medium-temperature PECVD Grown Si-rich Si_{1-x}C_x” *2011 Material Research Society Spring Meeting (MRS Spring 2010)*, Poster paper. 1012507, San Francisco, C.A, USA, Apr. 25-29, 2011.
 211. Yu-Chieh Chi and Gong-Ru Lin*, “Self-Starting Optical Pulsator Based 10-Gbit/s RZ-BPSK Down-Stream and Re-modulated RZ-OOK Up-Stream Link”, *Optical Fiber Communication Conference and Exhibit (2011 OFC/NFOEC Meeting)*, Post paper. JWA066, Los Angeles, CA, USA, March 6-10, 2011.
 210. Yu-Sheng Liao, Yu-Chieh Chi, Hao-Chung Kuo, and Gong-Ru Lin*, “Pulsating master and injected slave weak-resonant-cavity laser diodes based quasi-color- free 2.5Gb/s RZ DWDM-PON”, *Optical Fiber Communication Conference and Exhibit (2011 OFC/NFOEC Meeting)*, Post paper. JWA067, Los Angeles, CA, USA, March 6-10, 2011.
- 2010**
209. Yi-Hao Pai, Kuang-Nan Cheng, and Gong-Ru Lin*, “1.55μm Photoluminescent Iron Silicide Prepared by Thermal Diffusion of Iron Nanoparticles into Si Substrate”, *Asia Communications and Photonics Conference and Exhibition (ACP 2010)*, Poster paper, Shanghai, China, December 9-11, 2010.
 208. Jung-Jui Kang, Chao-Kuei Lee, and Gong-Ru Lin*, “Fractional Talbot effect induced rational-harmonic mode-locking of 40-GHz SOA fiber laser”, *Asia Communications and Photonics Conference and Exhibition (ACP 2010)*, Oral paper, Shanghai, China, December 9-11, 2010.
 207. Bo-Han Lai, Chih-Hsien Cheng, and Gong-Ru Lin*, “Influence of the thickness variation of the SiO_x layer on the Si Quantum Dots based MOSLED”, *Asia Communications and Photonics Conference and Exhibition (ACP 2010)*, Oral paper. ThF5, Shanghai, China, December 9-11, 2010.
 206. Chun-Ju Lin, Yi-Hung Lin, Gong-Cheng Lin, Hai-Lin Wang, and Gong-Ru Lin*, “Weak-resonant-cavity Laser Diode Transmitter Injection-locking by Amplitude Squeezed ASE Data-stream with Optimized Extinction Ratio”, *Optoelectronics and Communications Conference (OECC 2010)*, Poster paper. 00277, Sapporo, Japan, July 5-9, 2010.
 205. Yi-Hao Pai, Yung-Hsiang Lin, and Gong-Ru Lin*, “Luminescence and photoconductivity of inverse electrolysis synthesized low dimensional ZnO form Zn in NaCl aqueous solution”, *Optoelectronics and Communications Conference (OECC 2010)*, Poster paper, Sapporo, Japan, July 5-9, 2010.
 204. Gong-Ru Lin*, and Yu-Chan Lin, “Sub-100fs Soliton Compression of Optical Injection Mode-locked SOA Fiber Laser Pulse”, *Optoelectronics and Communications Conference (OECC 2010)*, Poster paper, 00220, Sapporo, Japan, July 5-9, 2010.
 203. Yung-Hsiang Lin, Shih-Min Lin, Chien-Chieh Lee, Chii-Chang Chen, and Gong-Ru Lin*, “Single-Mode Emission from Si Nanocrystal Embedded Si-rich SiO_x film with Photonic Crystal Resonant Cavity”, *Conference on Lasers and Electro-Optics (CLEO/QELS 2010)*, Oral paper, San Jose, California, May 18-20, 2010.
 202. Tzu-Chieh Lo, and Gong-Ru Lin*, “Optical Reflection and Transmittance of Annealing Temperature

- Dependent of Silicon-rich Silicon Carbide Film”, **2010 Material Research Society Spring Meeting (MRS Spring 2010)**, Poster paper. 757364, San Francisco, CA USA., Apr. 5-9, 2010.
201. Yu-Chieh Chi and Gong-Ru Lin*, “Self-pulsating DFBLD-EAM Link Based Synthesizer-free 10 Gbit/s Return-to-zero On-off-keying Transmission”, **2010 Asia-Pacific Microwave Photonics Conference (APMP 2009)**, Oral paper. TA1-1, Hong Kong, China, April 22-24, 2010.
 200. Chih-Hsien Cheng, Yi-Hao Pai, Gong-Ru Lin*, “Synthesis of crystalline Si embedded semi-insulating a-Si:H film by He carried SiH₄ in LT-PECVD” **2010 Material Research Society Spring Meeting (MRS Spring 2010)**, Oral paper. 758351, San Francisco, CA USA, Apr. 5-9, 2010.
 199. Chih-Hsien Cheng, Po-Sheng Wang, Chih-I Wu, and Gong-Ru Lin*, “Multi-color photoluminescence in Carbon rich a-Si_xC_{1-x}:H by detuning the ratio of CH₄/SiH₄ by PECVD under different annealing temperature”, **2010 Material Research Society Spring Meeting (MRS Spring 2010)**, Poster paper. 758353, San Francisco, C.A, USA., Apr. 5-9, 2010.
 198. Chun-Chieh Chen, Yi-Hao Pai, and Gong-Ru Lin*, “FTIR analysis on phase transformed a-SiC films”, **2010 Material Research Society Spring Meeting (MRS Spring 2010)**, Poster paper. 759035, San Francisco, C.A, USA., Apr. 5-9, 2010.
 197. Chung-Lun Wu, and Gong-Ru Lin*, “Blue-Yellow-Red Multi-color Si-rich SiO_x Strip-Loaded Waveguide Amplifier”, **Optical Fiber Communication Conference and Exhibit (2010 OFC/NFOEC Meeting)**, Poster paper. JWA14, San Diego, C.A., USA, Mar. 23-25, 2010.
 196. Yi-Hao Pai, and Gong-Ru Lin*, “Electrochemical Behavior of Zn Anodes in Zn/Air Batteries for Nano-roughened ZnO Structure Synthesis”, **IEEE International Nanoelectronics Conference**, Poster paper, Hong Kong, China, January, 3-8, 2010.

2009

195. Jin-Chen Chiu, Yi-Fen Lan, Jung-Jui Kang, Chia-Ming Chang, Zih-Shun Haung, Chao-Yung Yeh, Chao-Kuei Lee, Gong-Ru Lin*, Jiang-Jen Lin, and Wood-Hi Cheng, “Passively mode-locked lasers using saturable absorber incorporating dispersed single-wall carbon nanotubes”, **2009 Proceedings 59th Electronic Components and Technology Conference (ECTC 2009)**, p 827-830, San Diego, California, USA, May 26-29, 2009.
194. Yu-Hao Liao, Yi-Hao Pai, and Gong-Ru Lin*, “A Inverse electrolysis method to Synthesize Surface Nano-roughened ZnO Contact Electrode”, **2009 Material Research Society Fall Meeting 2009 (MRS Fall 2009)**, Post paper. 676711, Boston, U.S., Nov. 30-Dec. 4, 2009.
193. Yung-Hsiang Lin, Yi-Hao Pai and Gong-Ru Lin*, “Surface dangling bond dependent enhancement on Raman scattering and Si-O-Si stretching mode absorption of Si nano-rods”, **2009 Material Research Society Fall Meeting (MRS Fall 2009)**, Post paper. 673245, Boston, USA, Dec. 2, 2009.
192. Chun-Chieh Chen, Cheng-Tao Lin, Yi-Hao Pai, and Gong-Ru Lin*, “Comparison of MISLEDs made on Si-rich SiO_x and SiN_x”, **2009 Material Research Society Fall Meeting (MRS Fall 2009)**, Poster paper. 674065, Boston, M.A, U.S.A., Nov. 30 - Dec. 5, 2009.
191. Tzu-Chieh Lo, Chun-Chieh Chen, Chih-Hsien Cheng, and Gong-Ru Lin*, “Annealing Temperature Dependent Self-organized Silicon Nanocrystal precipitation in Silicon-rich Silicon Carbide”, **2009 Material Research Society Fall Meeting (MRS Fall 2009)**, Oral paper. 673961, Boston, M.A, U.S.A., Nov. 30 - Dec. 5, 2009.
190. Chih-Hsien Cheng, Bo-Han Lai, and Gong-Ru Lin*, “Red-green-blue MOSLED made by PECVD grown SiO_x with detuning RF plasma power”, **2009 Material Research Society Fall Meeting (MRS Fall 2009)**, Oral paper. 673451, Boston, M.A, U.S.A., Nov. 30 - Dec. 5, 2009.
189. Chung-Lun Wu, Cheng-Wei Lian, and Gong-Ru Lin*, “Gain saturation of 785-nm laser signal amplified in Si-rich SiO_x strip-loaded waveguides on quartz and Si”, **2009 Material Research Society Fall Meeting (MRS Fall 2009)**, Oral paper. 673676, Boston, M.A, USA, Nov. 30-Dec. 4, 2009.
188. Hsiao-Hua Wu, Kuei-Huei Lin, Jung-Jui Kang, Chao-Kuei Lee, and Gong-Ru Lin*, “Operation-State Manipulation of a Passively Mode-Locked Erbium-Doped Fiber Laser by Polarization Control”, **The 14th OptoElectronics and Communications Conference (OECC 2009)**, Paper FA1, Hong Kong SAR, July 13-17, 2009
187. Yu-Chan Lin, Kuen-Cherng Lin, and Gong-Ru Lin*, “Optical OC-192 NRZ Injection Induced 540-fs Wavelength Converted Clock Pulse Recovery from SOA Fiber Ring”, **The 8th Pacific Rim Conference on Lasers and Electro-Optics (CLEO/PR 2009)**, Oral paper, Shanghai, China, Aug. 30- Sep. 3, 2009.

186. Yu-Chieh Chi, Jung-Jui Kang, Chao-Kuei Lee, and Gong-Ru Lin*, "10 Gbit/s On-Off-Keying RZ Data Generation Using a Self-Feedback Pulsating FPLD," *The 8th Pacific Rim Conference on Lasers and Electro-Optics (CLEO/PR 2009)*, Oral paper, WD2-5, Shanghai, China, Aug. 30-Sep. 3, 2009.
185. Yu Chieh Chi, and Gong Ru Lin*, "Chirp Dynamics of VCSEL Based Return-to-Zero Generator 2009 年第二屆海峽兩岸博士生論壇(光學微結構和激光技術)", Oral paper, Nanjing, China, Jul. 5-8, 2009.
184. Yi-Hung Lin, Tzu-Kang Cheng, Hai-Lin Wang, Gong-Cheng Lin, and Gong-Ru Lin*, "Injection-Locked Mode Number Tunable Weak-Resonant-Cavity," *The 8th Pacific Rim Conference on Lasers and Electro-Optics (CLEO/PR 2009)*, Post, Shanghai, China, Aug. 30-Sep. 3, 2009.
183. Jung-Jui Kang, Yi-Jing You, Kuei-Huei Lin, Hsiao-Hua Wu, Chao-Kuei Lee, and Gong-Ru Lin*, "Observation of Pulse Dynamics in an Operation State Switchable Erbium-Doped Fiber Laser," *The 8th Pacific Rim Conference on Lasers and Electro-Optics (CLEO/PR 2009)*, Post, Shanghai, China, Aug. 30-Sep. 3, 2009.
182. Yin-Hsun Huang, Gong-Cheng Lin, Hai-Lin Wang, Yi-Hung Lin, Sun-Chien Ko, Jy-Wang Liaw, and Gong-Ru Lin*, "Weak-Resonant-Cavity FPLD Based Down-Stream Amplitude Squeezer for Injection-Locking RSOA Transmitter in DWDM-PON," *2009 Conference on Lasers and Electro-Optics (CLEO 2009)*, paper JThE81, May 31 – June 5, 2009, Baltimore, Maryland, USA.
181. Wei-Lun Hsu, Yi-Hao Pai, and Gong-Ru Lin*, "Low Temperature Synthesis of Silicon Nanocrystals in Porous Anodic Aluminum Oxide Substrate", *2009 Material Research Society Spring Meeting (MRS Spring 2009)*, Poster 578923, San Francisco, C.A., Apr. 13-17, 2009.
180. Yu-Chung Lien, Yi Hao Pai, and Gong-Ru Lin*, "Lengthening Retention Time of MOS Memory Capacitor by employing SiO_x with Buried Si Nanocrystals of Optimized Size and Density", *2009 Material Research Society Spring Meeting (MRS Spring 2009)*, Poster. 578918, San Francisco, USA, Apr. 13 - 17, 2009.
179. Tzu-Kang Cheng, Yi-Hung Lin, Gong-Cheng Lin, Hai-Lin Wang, and Gong-Ru Lin*, "Chirp and Extinction of Weak-Resonant-Cavity FPLD based DWDM-PON with 200 GHz AWG Channel", *2009 Asia-Pacific Microwave Photonics Conference (APMP 2009)*, Oral paper, SessionM04, April 22-24, 2009.
178. Tzu-Kang Cheng, Yi-Hung Lin, Gong-Cheng Lin, Hai-Lin Wang, and Gong-Ru Lin*, "AWG Channel Spacing Induced WRC-FPLD Based WDM-PON for Crosstalk Reduction and Increase of Network Capacities", *2009 Asia-Pacific Microwave Photonics Conference (APMP 2009)*, Oral paper, SessionM03, April 22-24, 2009.
177. Gong-Ru Lin*, Chia-Chi Lin, Yu-Chieh Chi, Hao-Chung Kuo, and Peng-Chun Peng, "10-GHz Electrical-Comb Direct-Modulation of TO-can Packaged VCSEL for RZ Generation beyond 10 Gbit/s", *2009 Asia-Pacific Microwave Photonics Conference (APMP 2009)*, Oral paper, SessionG04, April 22-24, 2009.

2008

176. Yu-Chung Lien, Cheng-Tao Lin, Chi-Kuan Lin, and Gong-Ru Lin*, "Nonvolatile memory characteristics of a MOS Diode with buried Silicon Nanocrystals and Interfacial Si Nano-pyramids", *2008 Material Research Society Fall Meeting (MRS Fall 2008)*, Oral paper. 519885, Boston, USA, Dec. 1-5, 2008.
175. Wei-Lun Hsu, Fan-Shuen Meng, Cheng-Tao Lin, Kuang-Chung Liu, Tzu-Huan Cheng, Chee-Wee Liu, Jian-Jang Huang, and Gong-Ru Lin*, "Comparison on Optimized Optical Transmission and Electrical Resistivity between Indium Tin Oxide and Gallium Doped Zinc Oxide", *2008 Material Research Society Fall Meeting (MRS Fall 2008)*, Poster 519951, Boston, U.S., Dec. 1-5, 2008.
174. Fan-Shuen Meng, Yi-Hao Pai, and Gong-Ru Lin*, "Geometrical Factor Dependent Brewster Angle Shift of Silicon Nano-Pillars", *2008 Material Research Society Fall Meeting 2008 (MRS Fall 2008)*, Poster 519784, Boston, U.S., Dec. 1-5, 2008.
173. Yu-Chieh Chi, Chia-Chi Lin, Hao-Chung Kuo, Peng-Chun Peng, Gong-Ru Lin*, "Bit-Error-Rate and Chirp analyses of a Gain-Switching VCSEL based All-Optical NRZ-to-RZ Converter", *Photonics in Switching 2008 (PS 2008)*, Oral paper D-05-4, Sapporo, Japan, 4-7 August 2008.
172. Mu-Chieh Lo, Kun-Chieh Yu, and Gong-Ru Lin*, "Chirp Control of 10 Gbit/s RZ Data Stream Converted by Semiconductor Optical Amplifier Using Multi-Mode Inverse Optical Comb Injection", *Photonics in Switching 2008 (PS 2008)*, Oral paper D-07-2, Sapporo, Japan, 4-7 August 2008.
171. Yi-Hung Lin, Tzu-Kang Cheng, Yu-Chieh Chi, Gong-Cheng Lin, and Gong-Ru Lin*, "Bias and temperature effect of an injection locked reflective SOA upstream transmitter in WDM-PON with 200GHz channel bandwidth", *Photonics in Switching 2008 (PS 2008)*, Poster paper P-19, Sapporo, Japan, 4-7 August 2008.

170. Yi-Hung Lin, Tzu-Kang Cheng, Hai-Lin Wang, Gong-Cheng Lin, and Gong-Ru Lin*, "Effect of AWG Channel Bandwidth on BER of Injection-Locked RSOA Based ONU in WDM-PON System", *Photonics in Switching 2008 (PS 2008)*, Poster paper P-17, Sapporo, Japan, 4-7 August 2008.
169. Jung-Jui Kang, Guo-Hsuan Peng and Gong-Ru Lin*, "200GHz-Spacing DWDM Channel Pulsed Optical Carrier Generation by 10GHz Mode-Locking of Weak-Resonant-Cavity Fabry-Perot Laser Diode Fiber Ring", *Opto-Electronics and Communications Conference (OECC 2008)*, Oral paper, Sydney, Australia, 1-10 July 2008.
168. Cheng-Tao Lin and Gong-Ru Lin*, "Luminescent-Wavelength Tunable Silicon-rich Silicon Nitride LED," *The OSA Topical Conference on Nanophotonics 2008*, Oral paper Nano197, Nanjing, China, May 26-29, 2008.
167. Wei-Lun Hsu, Cheng-Tao Lin, Tzu-Huan Cheng, Shih-Chiang Yen, Chee-Wee Liu, Din Ping Tsai, and Gong-Ru Lin*, "Annealing Induced Refinement on Optical Transmission and Electrical Resistivity of Indium Tin Oxide", *The OSA Topical Conference on Nanophotonics 2008*, Oral paper Nano211, Nanjing, China, May. 26-29, 2008.
166. Tzu-Kang Cheng, Hai-Lin Wang, Gong-Cheng Lin and Gong-Ru Lin*, "Chirp of Color-Free Injection-Locked Reflective Semiconductor Optical Amplifier Based Transmitter in 200GHz AWG Based WDM-PON after 25km Metropolitan Transmission", *Conference on Lasers and Electro-Optics (CLEO/QELS 2007)*, Poster paper, San Jose, California, May 4-9, 2008.
165. Cheng-Wei Lian, and Gong-Ru Lin*, "Amplified Spontaneous Emission and Optical Gain Coefficient of SiO_x Based Planar Waveguide with Buried Silicon Nanocrystals on Silicon Substrate", *Conference on Lasers and Electro-Optics (CLEO/QELS 2007)*, Oral paper CMK4, San Jose, California, May 4-9, 2008.
164. Chung-Hsiang Chang and Gong-Ru Lin*, "Blue and yellow electroluminescence of MOSLED made on Si-rich SiO_x grown by PECVD with detuning buried Si nanoclusters size", *Conference on Lasers and Electro-Optics (CLEO/QELS 2007)*, Oral paper JThA96, San Jose, California, May 4-9, 2008.
163. Chung-Hsiang Chang and Gong-Ru Lin*, "Optimized O/Si Composition Ratio for Enhancing Si Nanocrystal Based Luminescence in Si-rich SiO_x Grown by PECVD with Argon Diluted SiH₄", *2008 Materials Research Society Spring Meeting (2008 MRS Spring Meeting)*, San Francisco, California, March 24-28, 2008.
162. Bo-Han Lai and Gong-Ru Lin*, "Emission wavelength control of Si-rich SiO_x MOSLED by detuning vapor fluence and plasma power during PECVD growth", *2008 Materials Research Society Spring Meeting (2008 MRS Spring Meeting)*, post paper I10.20, San Francisco, California, March 24-28, 2008.
161. Cheng-Wei Lian, and Gong-Ru Lin*, "A Buried Silicon Nanocrystals Based High Gain Coefficient SiO₂/SiO_x/SiO₂ Strip-Loaded Waveguide Amplifier on Quartz Substrate", *2008 Materials Research Society Spring Meeting (2008 MRS Spring Meeting)*, oral paper K5.2, San Francisco, California, March 24-28, 2008.
160. Chung-Hsiang Chang, Chin-Hua Hsieh, Li-Jen Chou, and Gong-Ru Lin*, "Blue and Yellow Electroluminescence of MOSLED Made on Si-rich SiO_x Film with Detuning Buried Si Nanoclusters Size", *2008 Materials Research Society Spring Meeting (2008 MRS Spring Meeting)*, Symposium A, Oral Paper 423916, San Francisco, California, March 24-28, 2008.

2007

159. Guo-Hsuan Peng and Gong-Ru Lin*, "Effect of Feedback and Injection on Mode-Locking of a Weak-Resonant-Cavity Fabry-Perot Laser Diode Based Fiber Ring", *5th Workshop on Fibers and Optical Passive Components (WFOPC 2007)*, Oral paper F2A-3, Taipei, Taiwan, 5-7 December 2007.
158. Tzu-Kang Cheng, Hai-Lin Wang, Gong-Cheng Lin, and Gong-Ru Lin*, "The influence of biased current and temperature on an injection locked reflective semiconductor optical amplifier based transmitter for 200GHz bandwidth WDM-PON applications", *5th Workshop on Fibers and Optical Passive Components (WFOPC 2007)*, Poster paper THP-7, Taipei, Taiwan, 5-7 December 2007.
157. Yu-Sheng Liao and Gong-Ru Lin*, "22-channel selectability of directly modulated FPLD under side-mode injection-locking", *5th Workshop on Fibers and Optical Passive Components (WFOPC 2007)*, Poster paper THP-8, Taipei, Taiwan, 5-7 December 2007.
156. Mu-Chieh Lo, Kun-Chieh Yu, and Gong-Ru Lin*, "Comparison on the chirp of 10 Gbit/s RZ data stream converted by the single- and multi-wavelength inverse optical comb injected SOA", *5th Workshop on Fibers and Optical Passive Components (WFOPC 2007)*, Poster paper THP-9, Taipei, Taiwan, 5-7 December 2007.
155. Chia-Chi Lin, Hao-Chung Kuo, Peng-Chun Peng and Gong-Ru Lin*, "Gain-switching VCSEL based

- all-optical NRZ-to-PRZ data converter”, *5th Workshop on Fibers and Optical Passive Components (WFOPC 2007)*, Poster paper THP-14, Taipei, Taiwan, 5-7 December 2007.
154. Ming-Chang M. Lee, Wei-Chao Chiu, Tse-Ming Yang, Chin-Hung Chen, and Gong-Ru Lin, “Measurement of nonlinear loss and four-wave mixing on novel fin-like silicon photonic wires”, *5th Workshop on Fibers and Optical Passive Components (WFOPC 2007)*, Oral paper W2B-2, Taipei, Taiwan, 5-7 December 2007.
 153. Gong-Cheng Lin, Sun-Chien Ko, Yin-Hsun Huang, Hai-Lin Wang, Yu-Sheng Liao, and Gong-Ru Lin*, “Self-seeding injection of anti-reflection coated FP laser amplifier based transmitters for wavelength division multiplexing PON”, *2006 Asia-Pacific Optical and Wireless Communications Conference and Exhibition (APOC2007)*, Oral paper. 6783-96, Wuhan, China, Nov. 5, 2007.
 152. Yu-Sheng Liao, Yung-Jui Chen, and Gong-Ru Lin*, “22-Channel Capacity of 2.5Gbit/s DWDM-PON ONU transmitter by Direct-Modularly Side-Mode Injection Locked FPLD”, *2006 Asia-Pacific Optical and Wireless Communications Conference and Exhibition (APOC2007)*, Oral paper. 6783-90, Wuhan, China, Nov. 5, 2007.
 151. Kun-Chieh Yu, Mu-Chieh Lo, and Gong-Ru Lin*, “Effect of gain spectral linewidth on chirp of 10 Gbit/s RZ data stream converted by inverse optical comb injected semiconductor optical amplifier”, *2006 Asia-Pacific Optical and Wireless Communications Conference and Exhibition (APOC2007)*, Oral paper. 6783-40, Wuhan, China, Nov. 3, 2007.
 150. Guo-Hsuan Peng and Gong-Ru Lin*, “Optical injection-mode-locking of a weak-resonant-cavity Fabry-Perot laser diode-based fiber ring”, *2006 Asia-Pacific Optical and Wireless Communications Conference and Exhibition (APOC2007)*, Oral paper. 6783-40, Wuhan, China, Nov. 4, 2007.
 149. Gong-Ru Lin*, “Si Nanocrystal Based MOSLED on Si Nano-Pillar Substrate with Micro-Watt Power and 0.1% Quantum Efficiency”, *4th International Conference on Group IV Photonics (GFP2007)*, Tokyo, Japan, Sep. 19 – 21, 2007.
 148. Chun-Jung Lin and Gong-Ru Lin*, “A CO₂ laser rapid-thermal-annealing SiO_x based metal-oxide-semiconductor light emitting diode”, *OSA Topical Conference on Nanophotonics (NANO2007)*, poster N56, Hangzhou, China, June 18-21, 2007.
 147. Gong-Ru Lin*, “Enhanced Electroluminescence from Nanocrystallite Si Based MOSLED by Interfacial Si Nanopyramids”, *OSA Topical Conference on Nanophotonics (NANO2007)*, paper N74, Hangzhou, China, June 18-21, 2007.
 146. Gong-Ru Lin*, “All-Optical 10Gbit/s Data Format Conversion in Temporally Gain Shaped Semiconductor Optical Amplifier Based”, *2007 Symposium on Next-Generation Lightwave Communications*, Invited talk, Chinese University of Hong Kong (CUHK), Hong Kong, June 11-13, 2007.
 145. Y.-S. Liao, Y.-J. Chen, Y.-H. Huang, H.-L. Wang, S.-C. Ko, G.-C. Lin, and Gong-Ru Lin*, “A Novel Anti-Reflection Coated FP Laser Amplifier for 2.5Gbit/s DWDM-PON Transmission”, *Conference on Lasers and Electro-Optics (CLEO/QELS 2007)*, paper JTuA121, Baltimore Maryland, USA, May 6-11, 2007.
 144. J.-J. Kang, C.-K. Lee, and Gong-Ru Lin*, “Competition between 20th-Order Rational Harmonic Mode-Locking and Gain-Switching in Inverse Optical Comb Injected Semiconductor Optical Amplifier Fiber Ring Laser”, *Conference on Lasers and Electro-Optics (CLEO/QELS 2007)*, paper JTuA81, Baltimore Maryland, USA, May 6-11, 2007.
 143. K.-C. Yu, Y.-S. Liao, and Gong-Ru Lin*, “Duty-Cycle and Chirp Diagnosis of All-Optical Format Conversion Data in Multi- and Single-Wavelength Inverse Optical Comb Injected Semiconductor Optical Amplifier”, *Conference on Lasers and Electro-Optics (CLEO/QELS 2007)*, paper JTuA81, Baltimore Maryland, USA, May 6-11, 2007.
 142. Gong-Ru Lin*, “All-in-one Amplified Compressor for Sub-50fs Soliton Generation from Mode-Locked Fiber Lasers”, *2007 Asia-Pacific Microwave Photonics Conference (AP-MWP 2007)*, Jeju Island, Korea, April 25-27, 2007.
 141. Chun-Jung Lin and Gong-Ru Lin*, “μ-Watt Enhanced Electroluminescent Power of Silicon Nanocrystal Light-Emitting Diodes Made on Nano-Scale Silicon-Tip-Array Substrate”, *Materials Research Society’s 2007 MRS Spring Meeting*, San Francisco, CA, USA, April 9-13, 2007.
 140. Yu-Sheng Liao and Gong-Ru Lin*, “22-Channel Detuning Capacity of a Side-Mode Injection Locked FPLD for Directly Modulated 2.5Gbit/s DWDM-PON”, *Optical Fiber Communication Conference and Exhibit (2006 OFC/NFOEC Meeting)*, Session OMS, Oral paper OMS8, Anaheim, California, March 25-29, 2007.
 149. Gong-Ru Lin* and Yin-Tsong Lin “Amplified Compression of 300-fs Er-Doped Fiber Laser Pulse to 29 fs in

2006

- a Special Large-Mode-Area Er-Doped Fiber”, *Optical Fiber Communication Conference and Exhibit (2006 OFC/NFOEC Meeting)*, Session OMF, Poster paper OMF5, Anaheim, California, March 25-29, 2007.
138. Gong-Ru Lin* and Chun-Jung Lin, “Enhancement of Fowler-Nordheim Tunneling Based Light Emission from metal-SiO_x-Si MOSLED”, the *3rd International Conference on Group IV Photonics*, oral paper FA3, September 13-15, Ottawa Canada, 2006
 137. Gong-Ru Lin* and Chun-Jung Lin, “SiO_x/Si Interfacial Si Nano-Pyramids Enhanced Electroluminescence from Si-Rich SiO_x MOSLED”, the *3rd International Conference on Group IV Photonics*, poster paper 22, September 13-15, Ottawa Canada, 2006.
 136. Jun-Yuan Chang, Yu-Sheng Liao, Hai-Han Lu, and Gong-Ru Lin*, “Wavelength control of L-band erbium-doped fiber laser with tunable-ratio output couplers”, *2006 Asia-Pacific Optical and Wireless Communications Conference and Exhibition (APOC 2006)*, Session APOC02, paper 6351-71, Gwangju Korea, September 3-7, 2006.
 135. Kun-Chieh Yu, Yu-Sheng Liao, and Gong-Ru Lin*, “Self Optical Decision Gating of Degraded RZ Data Stream at 10Gbits/s with a Optical-Clock-Injected Semiconductor Optical Amplifier”, *2006 Asia-Pacific Optical and Wireless Communications Conference and Exhibition (APOC 2006)*, Session APOC03, paper 6353-42, Gwangju Korea, September 3-7, 2006.
 134. Yu-Sheng Liao, I-Shiang Chiu, and Gong-Ru Lin*, “Femtosecond Harmonically Optical-Injection Mode-Locked Semiconductor Optical Amplifier Based Fiber Lasers”, *2006 Asia-Pacific Optical and Wireless Communications Conference and Exhibition (APOC 2006)*, Session APOC01, paper 6351-7, Gwangju Korea, September 3-7, 2006.
 133. Gong-Ru Lin*, “All-Optical NRZ-to-RZ Data Format Conversion with Optically Injected Laser Diodes or Semiconductor Optical Amplifiers”, *2006 Asia-Pacific Optical and Wireless Communications Conference and Exhibition (APOC 2006)*, Session APOC01, paper 6353-93, Gwangju Korea, September 3-7, 2006.
 132. H.-Y. Huang, Jin-Wei Shi, Y.-S. Wu, J.-I. Chyi, J.-K. Sheu, W.-C. Lai, G.-R. Lin, and Ci-Ling Pan, “Modulation-Speed Enhancement of a GaN Based Green Light-Emitting-Diode (LED) by Use of n-type Barrier Doping for Plastic Optical Fiber (POF) Communication”, *OSA/IEEE Conference on Laser and Electro-Optics (CLEO2006)*, Poster Session II Paper JWB74, Long Beach, California USA, May 21-26, 2006.
 131. Chi-Ming Hung, Kun-Chieh Yu, Yung-Cheng Chang, and Gong-Ru Lin*, “All-Optical Decision Gating of 10 Gbit/s RZ Data Stream with a Reshaping-Optical-Clock Controlled Semiconductor Optical Amplifier”, *OSA/IEEE Conference on Laser and Electro-Optics (CLEO2006)*, Joint Poster Session II Paper JWB36, Long Beach, California USA, May 21-26, 2006.
 130. Chun-Jung Lin, Chi-Kuan Lin, and Gong-Ru Lin*, “Synthesis of Si Nano-Pyramids at SiO_x/Si Interface for Enhancing Electroluminescence of Si-Rich SiO_x Based MOS Diode”, *OSA/IEEE Conference on Laser and Electro-Optics (CLEO2006)*, Joint Poster Session I Paper JTuD43, Long Beach, California USA, May 21-26, 2006.
 129. Yu-Sheng Liao, Gong-Ru Lin*, Hao-Chung Kuo, Kai-Ming Feng, Milton Feng, “A 10-Gbps In_{0.53}Ga_{0.47}As p-i-n Photodiode Receiver on Metamorphic InGaP Buffered GaAs Substrate”, *OSA/IEEE Conference on Laser and Electro-Optics (CLEO2006)*, Oral Session CThD - Receivers and Detectors, Paper CThD1, Long Beach, California USA, May 21-26, 2006.,
 128. Chun-Jung Lin, Chi-Kuan Lin, Gong-Ru Lin*, “Enhanced Electroluminescence of Si-rich SiO_x Based MOS Diode by Interfacial Precipitated Si Nano-Pyramids”, *2006 Integrated Photonics Research and Applications (IPRA) and Nanophotonics (NANO) Topical Meeting*, Oral paper Nanomaterials NThC5, Uncasville, Connecticut USA, April 24-28, 2006.
 127. Chun-Jung Lin, Gong-Ru Lin*, Yu-Lun Chueh, and Li-Jen Chou, “Anomalous Absorption of Silicon Nanocrystals in Silicon-rich SiO_{1.25} Matrix Precipitated by CO₂ Laser Annealing”, *2006 Integrated Photonics Research and Applications (IPRA) and Nanophotonics (NANO) Topical Meeting*, Oral paper Nanomaterials NThC4, Uncasville, Connecticut USA, April 24-28, 2006.
 - ★ 126. Chia-Yang Chen, Chun-Jung Lin, and Gong-Ru Lin*, “Synthesis of Erbium Doped Si-rich SiO_x by Radio-Frequency Magnetron Co-sputtering using Si/SiO/Er₂O₃ Target”, *Materials Research Society's 2006 Spring Meeting*, San Francisco, CA, USA, April 17-21, 2006.
 - ★ 125. Huang-Shen Lin, Chih-Chiang Kao, Chun-Jung Lin, Hao-Chung Kuo, Shing-Chung Wang, and Gong-Ru

- Lin*, "Self-assembled Ni nanodot on SiO₂ film: a novel reactive ion etching mask for Si nanopillar formation on Si substrate" *2006 SPIE Symposium on Photonics Europe (PE 2006)*, paper 6195-32, Strasbourg, France, April 3-6, 2006.
- ★ 124. Gong-Ru Lin*, "White-light and near-infrared electroluminescence of furnace or CO₂ laser annealed Si-rich SiO₂ with structural defects and Si nanocrystals", *2006 SPIE Symposium on Photonics Europe (PE 2006)*, paper 6195-32, Strasbourg, France, April 3-6, 2006.
 - ★ 123. I-Hsiang Chiu and Gong-Ru Lin*, "Optimization on Cross-Gain-Modulating Power and Wavelength for Pulsed Data-Pattern Reshaping in Optical-Clock Controlled Semiconductor Optical Amplifier", *Optical Fiber Communication Conference and Exhibit (2006 OFC/NFOEC Meeting)*, Session JThB, Poster paper JThB19, Anaheim, California, March 5-10, 2006.
 - ★ 122. I-Hsiang Chiu and Gong-Ru Lin*, "10GHz Dark-Optical-Comb Injection-Mode-Locked Semiconductor Optical Amplifier Fiber Laser with 400fs and 30nm Tunable Pulses", *Optical Fiber Communication Conference and Exhibit (2006 OFC/NFOEC Meeting)*, Session OWI, Poster paper OWI28, Anaheim, California, March 5-10, 2006.
 - ★ 121. I-Hsiang Chiu and Gong-Ru Lin*, "10 Gbit/s All-Optical NRZ-to-RZ Data Format Conversion in a Dark-Optical-Comb Injected Semiconductor Optical Amplifier", *Optical Fiber Communication Conference and Exhibit (2006 OFC/NFOEC Meeting)*, Session JThB, Poster paper JThB33, Anaheim, California, March 5-10, 2006.
 - ★ 120. Yu-Sheng Liao, Hao-Chung Kuo, M. Feng, and Gong-Ru Lin*, "Metamorphic InGaP buffered In_{0.53}Ga_{0.47}As p-i-n photodetector grown on GaAs substrate for 10Gbit/s and beyond", Conference on Semiconductor Photodetectors III, part of the *SPIE Integrated Optoelectronic Devices 2006 Symposium*, San Jose, California, USA, January 21-26, 2006.
 - ★ 119. I-Hsiang Chiu and Gong-Ru Lin*, "Generation of 560 fs soliton at 10 GHz from optically cross-gain-modulation mode-locked SOA fiber laser", Conference on Fiber Lasers III: Technology, Systems, and Applications, part of the *SPIE Photonics West LASE Symposium*, San Jose, California, USA, January 21-26, 2006.

2005

- ★ 118. Yu-Sheng Liao, and Gong-Ru Lin*, "Beyond 10-Gbps operation of a metamorphic InGaP buffered In_{0.53}Ga_{0.47}As p-i-n photodetector grown on GaAs substrate", *2005 Asia-Pacific Optical and Wireless Communications Conference and Exhibition (APOC 2005)*, oral paper 6020-75, Shanghai China, November 6-10, 2005.
- ★ 117. Chun-Jung Lin, Hao-Chung Kuo, and Gong-Ru Lin*, "Analysis of silicon nanocrystals in silicon-rich SiO₂ synthesized by CO₂ laser annealing", *2005 Asia-Pacific Optical and Wireless Communications Conference and Exhibition (APOC 2005)*, oral paper 6020-72, Shanghai China, November 6-10, 2005.
- ★ 116. Yung-Cheng Chang, Ming-Chung Wu, and Gong-Ru Lin*, "A Pulse-Compressed and Harmonic Mode-Locked SOA-EDFA Laser Link with Suppressed Phase and Supermode Noises", *International Conference on Quantum Electronics 2005 and the Pacific Rim Conference on Lasers and Electro-Optics 2005 (IQEC/CLEO-PR 2005)*, Paper oral CThM1-5, Tokyo, Japan, July 11-15 2005.
- ★ 115. Yung-Cheng Chang, Yu-Huang Lin, J. H. Chen, and Gong-Ru Lin*, "All-Optical OC-192 NRZ-to-PRZ Data-Format Conversion by Injection-Locking a Synchronously Modulated Fabry-Perot Laser Diode", *OSA/IEEE Conference on Laser and Electro-Optics (CLEO2005)*, Poster Session III, Paper JThE81, Baltimore MA USA, May 22-27, 2005.
- ★ 114. I-Hsiang Chiu, Ming-Chung Wu, and Gong-Ru Lin*, "Generation of 1.8-ps Mode-Locked Semiconductor Optical Amplifier Fiber Laser Pulses by 60-ps Backward Optical Dark Comb Injection", *OSA/IEEE Conference on Laser and Electro-Optics (CLEO2005)*, Poster Session II, Paper JWB50, Baltimore MA USA, May 22-27, 2005.
- ★ 113. Chun-Jung Lin, Gong-Ru Lin*, Yu-Lun Chueh, and Li-Jen Chou, "CO₂ Laser Annealing Synthesis of Silicon Nanocrystals Buried in Si-rich SiO₂", *2005 MRS spring Meeting*, poster paper A19.2, San Francisco, CA USA, March 28-April 1, 2005
- ★ 112. Chia-Yang Chen, Chun-Jung Lin, Hao-Chung Kuo, Gong-Ru Lin*, Yu-Lun Chueh, Li-Jen Chou, Chih-Wei Chang and Eric Wei-Guang Diao, "Effects of N₂O Fluence on The PECVD-grown Si-rich SiO_x with Buried Si Nanocrystals", *2005 MRS spring Meeting*, poster paper A19.11, San Francisco, CA USA, March 28-April 1, 2005

- ★ 111. Chi-Kuan Lin, Hao-Chung Kuo, Gong-Ru Lin*, and M. Feng, "A Low-Dark-Current InGaAs Photodetector Made on Metamorphic InGaP Buffered GaAs Substrate", *Optical Fiber Communication Conference and Exhibit (2005 OFC/NFOEC Meeting)*, Session OFM - Detectors and Receivers, Paper OFM4, Anaheim, California, March 6-11, 2005.
- ★ 110. Ming-Chung Wu, Yung-Cheng Chang, and Gong-Ru Lin*, "Phase Noise and Supermode Suppression in Harmonic Mode-Locked Erbium-Doped Fiber Laser with a Semiconductor Optical Amplifier Based High-Pass Filter", *Optical Fiber Communication Conference and Exhibit (2005 OFC/NFOEC Meeting)*, Session OFJ - Pulsed Lasers, Paper OFJ6, Anaheim, California, March 6-11, 2005.
- ★ 109. Chia-Yang Chen, Chun-Jung Lin, Hao-Chung Kuo, Gong-Ru Lin*, Yu-Lun Chueh, Li-Jen Chou, Chih-Wei Chang and Eric Wei-Guang Diau, "Improved Near-infrared Luminescence of Si-rich SiO₂ with Buried Si Nanocrystals Grown by PECVD at Optimized N₂O Fluence", *Photonics West 2005, Conference on Synthesis and Photonics of Nanoscale Materials III, Symposia: Lasers and Applications in Science and Engineering*, San Jose, California, 22-27 January 2005.
- ★ 108. I-Hsiang Chiu, Yu-Sheng Liao, Yung-Cheng Chang, and Gong-Ru Lin*, "A 3.5-ps Mode-Locked Semiconductor Optical Amplifier Fiber Laser generated by 60-ps Backward Optical Dark Pulse-Train Injection", *Photonics West 2005, Symposia: Lasers and Applications in Science and Engineering*, San Jose, California, 22-27 January 2005.
- ★ 107. Chi-Kuan Lin, Gong-Ru Lin*, Chun-Jung Lin, Hao-Chung Kuo and Chia-Yang Chen, "Silicon Defect and Nanocrystal Related White and Red Electroluminescence of Si-rich SiO₂ Based Metal-Oxide-Semiconductor Diode", *Photonics West 2005, Conference on Fiber Lasers II: Technology, Systems, and Applications, Symposia: Lasers and Applications in Science and Engineering*, San Jose, California, 22-27 January 2005.
- ★ 106. Ming-Chung Wu, Yung-Cheng Chang, and Gong-Ru Lin*, "Suppression of Supermode and Phase Noises in Mode-Locked Erbium-Doped Fiber Laser with a Semiconductor Optical Amplifier Based High-Pass Filter", *Photonics West 2005, Conference on Fiber Lasers II: Technology, Systems, and Applications, Symposia: Lasers and Applications in Science and Engineering*, San Jose, California, 22-27 January 2005.

2004

- ★ 105. Chi-Kuang Lin, Yu-Sheng Liao, Hao-Chung Kuo, and Gong-Ru Lin*, "Low-leakage In_{0.53}Ga_{0.47}As p-i-n photodetector fabricated on GaAs substrate with linearly graded metamorphic In_xGa_{1-x}P buffer", *2004 Asia-Pacific Optical and Wireless Communications Conference and Exhibition (APOC 2004)*, paper. 5624-61, Beijing, China, November 7-11, 2004.
- ★ 104. Yi-Hsiang Chiu, Yu-Sheng Liao, and Gong-Ru Lin*, "The effect of backward injecting wavelength on the mode-locking dynamics of a semiconductor amplifier based fiber laser", *2004 Asia-Pacific Optical and Wireless Communications Conference and Exhibition (APOC 2004)*, paper. 5624-61, Beijing, China, November 7-11, 2004.
- ★ 103. Ming-Chung Wu, Yung-Cheng Chang, and Gong-Ru Lin*, "Comparison on the noise and jitter characteristics of harmonic injection-locked and mode-locked erbium-doped fiber lasers", *2004 Asia-Pacific Optical and Wireless Communications Conference and Exhibition (APOC 2004)*, paper. 5623-97, Beijing, China, November 7-11, 2004.
- 103. C.-J. Lin, Y.-L. Chueh, L.-J. Chou, C.-W. Chang, E. W. G. Diau, H.-C. Kuo, and G.-R. Lin, "Continuous-Wave and Time-Resolved Photoluminescence Analysis of Silicon Nanocrystals Formed by Thermal Annealing of Amorphous Silicon Oxides at Different Times", *2004 International Conference on Solid State Devices and Materials*, Poster session, paper P9-12, Tokyo, September 15-17, 2004.
- 102. Yung-Cheng Chang, Yu-Huang Lin, Yu-Sheng Liao, and Gong-Ru Lin*, "Tunable Dual-Wavelength NRZ-to-RZ Data-Format Transformer at 10 Gbps Using Non-DC-Biased and Synchronously Modulated Laser Diode", *Ninth Optoelectronics and Communications Conference/Third International Conference on Optical Internet (OECC/COIN2004)*, Poster session, paper 13p-106, Yokohama, Japan, July12-16, 2004.
- 101. Yu-Sheng Liao and Gong-Ru Lin*, "Detuning the Duty Cycle of Backward Optical Injection for Optimized Mode-Locking in Semiconductor Optical Amplifier Fiber Laser", *Ninth Optoelectronics and Communications Conference/Third International Conference on Optical Internet (OECC/COIN2004)*, Poster session, paper 13p-100, Yokohama, Japan, July12-16, 2004.
- 100. Yu-Huang Lin, Yung-Cheng Chang, Yu-Sheng Liao, and Gong-Ru Lin*, "Optically triggered on/off keying of 10-Gbit/s single-mode return-to-zero data pulse-train from Fabry-Perot laser diode", *Ninth Optoelectronics and Communications Conference/Third International Conference on Optical Internet*

- (*OECC/COIN2004*), Poster session, paper 13p-68, Yokohama, Japan, July12-16, 2004.
- ★ 99. Yu-Sheng Liao and Gong-Ru Lin*, “5 GHz optically cross-gain modulation induced mode-locking of semiconductor optical amplifier”, *OSA/IEEE Conference on Laser and Electro-Optics (CLEO2004)*, Poster Session II, Paper CWA-#982, San Francisco CA USA, May 16-21, 2004.
 - ★ 98. Yung-Cheng Chang and Gong-Ru Lin*, “Tunable dual wavelength NRZ-to-RZ format transformed data pulse-train generated from a non-dc-biased laser diode by externally pseudo-random-binary-sequence seeding”, *OSA/IEEE Conference on Laser and Electro-Optics (CLEO2004)*, Poster Session II, Paper CWA-#964, San Francisco CA USA, May 16-21, 2004.
 - ★ 97. Kuo-Cheng Yu, Chun-Jung Lin, M.-J. Ou-yang, Hao-Chung Kuo, and Gong-Ru Lin*, “Correlation between Surface Charge Accumulation and Pumping Intensity Dependent Red-Shifted Micro-Photoluminescence of Si-Implanted Quartz with Buried Si Nanocrystals”, *The 2004 Materials Research Society Spring Meeting (MRS2004)*, poster paper. A4.37, San Francisco CA, USA, April 12-16, 2004.
 - ★ 96. Chun-Jung Lin and Gong-Ru Lin*, “Luminescent lifetime analysis of silicon-ion-implanted glass and SiO₂/Si at different annealing processes”, *Photonics West 2004, Symposia: Ultrafast Phenomena in Semiconductors and Nanostructure Materials VIII*, San Jose, California, 25-29 January 2004
 - ★ 95. Yung-Cheng Chang and Gong-Ru Lin*, “Frequency detuning properties of EDFL pulses generated by harmonic mode-locking and regenerative amplification: a comparison”, *Photonics West 2004, Symposia: Lasers and Applications in Science and Engineering*, San Jose, California, 25-29 January 2004

2003

- ★ 94. Gong-Ru Lin* and Yu-Sheng Liao, “A Synchronous Modulation and Inter-Mixing Technique for Sensitivity and Error-Rate Analysis of Sonet PIN-TIA”, *2003 Asia-Pacific Optical and Wireless Communications Conference and Exhibition (APOC 2003)*, Session SC1, oral presentation, Wuhan, China, November 2-6, 2003. (**Invited Talk of APOC2003**)
- ★ 93. Chun-Jung Lin and Gong-Ru Lin*, “Continuous-Wave and Time-Resolved Photoluminescence Analysis of Defect Density Evolution in Silicon Implanted Borosilicate Glass”, *The Fifth Pacific Rim Conference on Lasers and Electro-Optics (CLEO/PR 2003)*, oral paper #P1038, Taipei, Taiwan, December 15-19, 2003.
- ★ 92. Gong-Ru Lin* and Yu-Sheng Liao, “A Synchronous Modulation and Inter-Mixing Technique for Sensitivity and Error-Rate Analysis of Sonet OC-3/155Mbps PIN-TIA”, *The Fifth Pacific Rim Conference on Lasers and Electro-Optics (CLEO/PR 2003)*, oral paper #P1015, Taipei, Taiwan, December 15-19, 2003.
- ★ 91. Gong-Ru Lin* and Jung-Rung Wu, “The Frequency Dependent Mode-Locking Behavior of an Optical-Injection-Locked Erbium-Doped Fiber Laser”, *The Fifth Pacific Rim Conference on Lasers and Electro-Optics (CLEO/PR 2003)*, poster paper #P0397, Taipei, Taiwan, December 15-19, 2003.
- ★ 90. Gong-Ru Lin* and Pai-Shen Hsueh, “The Linewidth and Noise Control of Fabry-Perot Diode Laser Mutually Injection-Locked with a Regenerative Traveling-Wave Semiconductor Optical Amplifier”, *The Fifth Pacific Rim Conference on Lasers and Electro-Optics (CLEO/PR 2003)*, oral paper #P0402, Taipei, Taiwan, December 15-19, 2003.
- ★ 89. Yung-Cheng Chang and Gong-Ru Lin*, “Harmonic Mode-Locked Fiber Lasers via Gain and Loss Modulation – a Comparison”, *The Fifth Pacific Rim Conference on Lasers and Electro-Optics (CLEO/PR 2003)*, oral paper #P0472, Taipei, Taiwan, December 15-19, 2003.
- ★ 88. Kuo-Cheng Yu and Gong-Ru Lin*, “Enhanced Visible Photoluminescence of Multi-Energy Silicon Ion Implanted SiO₂ Films”, *The Fifth Pacific Rim Conference on Lasers and Electro-Optics (CLEO/PR 2003)*, oral paper #P0485, Taipei, Taiwan, December 15-19, 2003.
- ★ 87. Gong-Ru Lin* and Chun-Jung Lin, “The Blue-Green Luminescence and Current-Voltage Characteristics of MOS Diode Made on Thermally Annealed Si⁺ Implanted SiO₂ Substrate”, *IEEE Third Nanotechnology Conference*, Seession WK: Nano-Optics, Nano-Optoelectronics, Nano-Photonics-II, oral paper WK5, San Francisco, CA, August 12-14, 2003
- ★ 86. Yung-Cheng Chang and Gong-Ru Lin*, “Characterization of optical and electrical pulse modulation induced harmonic mode-locking of fiber lasers”, *OSA Topical Meeting on Optical Amplifiers and Their Applications (OAA2003)*, paper# 138, Otaru, Japan, July 6-9, 2003.
- ★ 85. C.-J. Lin and Gong-Ru Lin*, “CW and Time-Resolved Photoluminescence Analysis of Silicon Implanted Glass Low-Temperature Annealed at Different Times”, *2003 MRS Spring Meeting*, paper #14.4, San Francisco, California, April 21-25, 2003.
- ★ 84. Gong-Ru Lin*, Jung-Rung Wu, and Yung-Cheng Chang, “40 GHz Rational Harmonic Mode-Locking of

2002

- Erbium-Doped Fiber Laser with Optical Pulse Injection”, *Optical Fiber Communication Conference and Exhibit (OFC2003)*, Session MF-Fiber Amplifier and Laser Sources, Atlanta Georgia, USA, March 24-28, 2003.
83. Gong-Ru Lin* and Y.-C. Chang, “Application of Microwave Phase-Locked Loop Phase Shifter in Delay-Time Control of Laser Systems”, *2002 Asia-Pacific Microwave Conference (APMC2002)*, Open Forum paper THOF07, Kyoto Japan, November 19-22, 2002.
- * 82. Pai-Shen Hsueh, Shih-Kai Lee, and Gong-Ru Lin*, “Optically Injection Mode-Locked 1.3 μm Semiconductor Optical Amplifier Fiber Ring Laser by Using Gain-Switching Single-Mode FPLD”, *Conference of Photonics Asia 2002*, paper. 4913-10, Beijing, China, October 14-18, 2002.
- * 81. Gong-Ru Lin* and Jung-Rung Wu, “Tunable Single-Mode Fiber Laser with a Low-Cost Active Fabry-Perot Filter of Ultra-Narrow-Linewidth and High Side-Mode-Suppressing Ratio”, *Conference on Asia-Pacific Optical and Wireless Communications*, paper. 4906-26, Beijing, China, October 14-18, 2002.
- * 80. Gong-Ru Lin* and Yung-Cheng Chang, “Optically Injected Rational-Harmonic Mode-Locking of Erbium-Doped Fiber Laser”, *Conference on Asia-Pacific Optical and Wireless Communications*, paper. 4905-61, Beijing, China, October 14-18, 2002.
- * 79. Yung-Cheng Chang, Jung-Rung Wu and Gong-Ru Lin*, “An intra-cavity injection-locked laser diode filtering and wavelength-tuning technology for erbium-doped fiber lasers”, *2002 OSA Annual Meeting and Exhibit/LS-XVIII*, Session MR—Narrow-linewidth and low-noise fiber lasers, Orlando, Florida, September 29-October 3, 2002.
- * 78. Chun-Jung Lin, Pai-Shen Hsueh, Shih-Kai Lee, and Gong-Ru Lin*, “Narrow-linewidth lasing of traveling-wave semiconductor optical amplifier with a close-loop laser-diode filtering technique”, *2002 OSA Annual Meeting and Exhibit/LS-XVIII*, Session WDD—Semiconductor Optical Amplifier Based Components II, Orlando, Florida, September 29-October 3, 2002.
- * 77. Chun-Jung Lin and Gong-Ru Lin*, “Optical-pulse-injection induced fractional harmonic mode-locking of erbium-doped fiber laser by using intra-cavity gain-switched laser diode”, *2002 OSA Annual Meeting and Exhibit/LS-XVIII*, Session MG—Ultrafast Fiber Lasers, Orlando, Florida, September 29-October 3, 2002.
76. Gong-Ru Lin*, “The Optoelectronic Properties of Borosilicate Glass Substrate with Buried Silicon Nanocrystals”, *Asia SPM4 and Taipei Symposium on Nanotechnology*, paper. P36, Taipei, Taiwan, August 12-15, 2002.
75. Gong-Ru Lin*, Jung-Rung Wu, Shih-Kai Lee, Yung-Cheng Chang, “A new class of feedback-injected single-wavelength Erbium-doped fiber laser with ultrahigh single-mode suppressing ratio”, Technical Digest of *7th Optoelectronics and Communications Conference (OECC 2002)*, paper. 10P-43, pp. 272-273, Yokohama, Japan, July 8-12, 2002. (Student Travel Grants)
74. Tze-An Liu, Ci-Ling Pan, Masahiko Tani, and Gong-Ru Lin*, “THz-radiation performance from multi-energy arsenic-ion-implanted GaAs and semi-insulating GaAs fabricated dipole antennas”, *13th International Conference on Ultrafast Phenomena*, paper ME34, pp. 28, Vancouver, BC, Canada, May 12-17, 2002.
73. Gong-Cheng Lin, Jy-Wang Liaw, and Gong-Ru Lin*, “Improvement on Coupling Efficiency between the End-face of Single-Mode and Erbium-Doped Fibers by Tipped Fiber Splicing”, Proceedings of *International Conference of Optics in Computing (OC2002)*, Paper PTuB18, pp. 319-321, Taipei, Taiwan, Apr. 8-11, 2002
72. S.-K. Lee, Jy-Wang Liaw, and Gong-Ru Lin*, “A Self-Feedback-Injected Single-mode Erbium-Doped Fiber Laser with High Side-mode Suppression Ratio”, Proceedings of *International Conference of Optics in Computing (OC2002)*, Paper OMB6, pp.26-29, Taipei, Taiwan, Apr. 8-11, 2002
71. Y.-C. Chang, G.-C. Lin, J.-R. Wu, and Gong-Ru Lin*, “A Pulse-Delay-Controller Integrated Regeneratively Mode-Locked Erbium-Doped Fiber Ring Laser”, Proceedings of *International Conference of Optics in Computing (OC2002)*, Paper PTuB16, pp. 313-315, Taipei, Taiwan, Apr. 8-11, 2002
70. Y.-C. Chang, S.-K. Lee, and Gong-Ru Lin*, “Harmonic and Rational-Harmonic Mode-Locking of Erbium-Doped Fiber Laser via Optical Pulse Injection”, Proceedings of *International Conference of Optics in Computing (OC2002)*, Paper PTuB17, pp. 316-318, Taipei, Taiwan, Apr. 8-11, 2002
69. Gong-Ru Lin*, Yao-Ling Cheng, and Y. Lai, “A regeneratively mode-locked erbium-doped fiber laser with a simple circuitry for jitter reduction and pulse-delay-tuning”, *Optical Fiber Communication Conference and Exhibit (OFC2002)*, Session WR-Fiber Laser Sources, Anaheim CA, USA, March 17-22, 2002.

2001

- ★ 68. Gong-Ru Lin*, Shr-Hsiung Hung, and Y.-C. Chang, "Electro-Optic Sampling of Free-Running Microwave PECL Signals by Using Frequency-Synchronized and Delay-time Tunable Laser Source", *Conference of Photonics Technology in the 21st Century*, part of SPIE's International Symposium on Photonics and Applications, paper. 4598-22, Singapore, 26-30 November 2001.
- ★ 67. Gong-Ru Lin* and Chin-Chia Hsu, "Novel Silicon-Rich SiO₂ Photoconductor", *Conference of Design, Fabrication, and Characterization of Photonic Devices II*, part of SPIE's International Symposium on Photonics and Applications, paper. 4594-04, Singapore, 26-30 November 2001.
- ★ 66. Gong-Ru Lin* Shih-Kai Lee and Kuei-Huei Lin, "Amplification and Shaping of Gigabit Optical Pulse by Using Traveling-Wave Semiconductor Optical Amplifier", *Conference of Photonics Technology in the 21st Century*, part of SPIE's International Symposium on Photonics and Applications, paper. 4598-29, Singapore, 26-30 November 2001.
- ★ 65. Gong-Ru Lin* and Chin-Chia Hsu, "Optoelectronic property of metal-semiconductor-metal photodetector fabricated on silicon-implanted SiO₂ substrate", *2001 OSA Annual Meeting*, Poster Session ThW, California, USA, October 14-18, 2001.
- ★ 64. Gong-Ru Lin* and Y.-C. Chang, "The dynamics of gain-switched semiconductor laser controlled by optoelectronic phase-locked loop phase shifter", *2001 OSA Annual Meeting*, Poster Session ThW, California, USA, October 14-18, 2001.
- ★ 63. Gong-Ru Lin*, Yao-Ling Cheng, and Y. Lai, "Actively or regeneratively mode-locked fiber lasers with inherent pulse-timing controller", *2001 OSA Annual Meeting*, Poster Session ThW, California, USA, October 14-18, 2001.
- ★ 62. Gong-Ru Lin* and Chung-Fei Lee, "Intracavity control of linewidth and wavelength of fiber ring laser by using feedback-injectable Fabry-Perot laser diode", *2001 OSA Annual Meeting*, Oral paper MD, California, USA, October 14-18, 2001.
- ★ 61. Gong-Ru Lin*, Shr-Hsiung Hung, and Y.-C. Chang, "Delay-line-free electro-optic waveform sampling of free-running and frequency-divided microwave ECL-formatted signals", *2001 OSA Annual Meeting*, Poster Session ThW, California, USA, October 14-18, 2001.
- 60. Gong-Ru Lin*, Yao-Ling Cheng, and Y. Lai, "Pulse-Delay Tuning of Regeneratively Mode-Locked Erbium-Doped Fiber Laser", *2001 Asia-Pacific Microwave Conference (APMC2001)*, Taipei, Taiwan, December 3-6, 2001.
- 59. Gong-Ru Lin* and Chung-Fei Lee, "The Performance of Single-Mode light Source Generated from EDFA Fiber Ring Cavity under Fabry-Perot Laser Diode Injection", *2001 Asia-Pacific Microwave Conference (APMC2001)*, Taipei, Taiwan, December 3-6, 2001.
- ★ 58. Gong-Ru Lin*, Shr-Hsiung Hung, and Y.-C. Chang, "Delay-Line-Free Electro-Optic characterization of Free-running Microwave Frequency Prescalers", *Conference of Optoelectronics, Materials, and Devices, Asia-Pacific Optical and Wireless Communications Conference and Exhibit (APOC 2001)*, Conference APO2 Poster Session, paper 4581-82, Beijing, China, November 12-16, 2001
- ★ 57. Gong-Ru Lin*, Shih-Kai Lee and Kuei-Huei Lin, "Chirped Pulse in Traveling-Wave Semiconductor Optical Amplifier", *Conference of Optoelectronics, Materials, and Devices, Asia-Pacific Optical and Wireless Communications Conference and Exhibit (APOC 2001)*, Conference APO2 Poster Session, paper 4581-83, Beijing, China, November 12-16, 2001
- ★ 56. Gong-Ru Lin* and Yao-Ling Cheng, "Delay-time tunable mode-locked erbium-doped fiber ring laser", *Conference of Passive Components and Transmission Systems, Asia-Pacific Optical and Wireless Communications Conference and Exhibit (APOC 2001)*, Conference APO3 Session 7, paper 4581-33, Beijing, China, November 12-16, 2001
- ★ 55. Gong-Ru Lin*, Y.-C. Chang, Tze-An Liu, and Ci-Ling Pan, "Photonic phase-tuning circuit for controlling the delay-time of passively mode-locked Ti:sapphire laser," *SPIE's 46th Annual Meeting, the International Symposium on Optical Science and Technology, Conference on "Radio Frequency Photonic Devices and Systems II"*, AM226, paper. 4490-04, San Diego CA, USA, 29 July-3 August, 2001.
- ★ 54. Gong-Ru Lin*, Y.-C. Chang, Tze-An Liu, and Ci-Ling Pan, "Controlling the Relative Delay-Time and Jitter of Femtosecond Ti:Sapphire/SBR Laser Pulse-Train by Using a Frequency-Stabilized PZT/Mirror", *4th Pacific Rim Conference on Lasers and Electro-Optics (CLEO/PR2001)*, paper WJ3-1, pp. - , Chiba, Japan, July 15-19, 2001. 國科會補助編號 NSC 89-2215-E-036-006

- ★ 53. Gong-Ru Lin*, Shih-Kai Lee, and Kuei-Huei Lin, “Chirped Amplification of Picosecond Gain-Switched Laser Pulse by Using Traveling-Wave Semiconductor Optical Amplifier”, **4th Pacific Rim Conference on Lasers and Electro-Optics (CLEO/PR2001)**, paper P1-16, pp. - , Chiba, Japan, July 15-19, 2001. 國科會補助編號 NSC 89-2215-E-036 -006
- ★ 52. Gong-Ru Lin*, Gong-Cheng Lin, Woo-Hu Tsai, and Kuei-Huei Lin, “A Novel Tipped Fiber Structure for Reduction of the Fusion-Induced Coupling Loss between Erbium-Doped and Single-Mode Fibers”, **4th Pacific Rim Conference on Lasers and Electro-Optics (CLEO/PR2001)**, paper P2-7, pp. - , Chiba, Japan, July 15-19, 2001. 國科會補助編號 NSC 89-2215-E-036-006
- ★ 51. Gong-Ru Lin*, Yao-Ling Cheng, and Y. Lai, “Phase-Shift-Keying of Actively Mode-Locked Erbium-Doped Fiber Ring Laser by Using an Inherent Delay-Locked-Loop”, **4th Pacific Rim Conference on Lasers and Electro-Optics (CLEO/PR2001)**, paper P2-53, pp. - , Chiba, Japan, July 15-19, 2001. 國科會補助編號 NSC 89-2215-E-036-002
- ★ 50. Gong-Ru Lin* and Chin-Chia Hsu, “Photocurrent Response of Shottky Diode on Silicon-Implanted SiO₂ Substrate”, **4th Pacific Rim Conference on Lasers and Electro-Optics (CLEO/PR2001)**, paper P1-77, pp. - , Chiba, Japan, July 15-19, 2001. 國科會補助編號 NSC 89-2215-E-036-006
- ★ 49. Gong-Ru Lin*, Shr-Hsiung Hung, and Y.-C. Chang, “Waveform Sampling of Free-running Frequency Prescaled Microwave Signals by Using Delay-Line-Free Electro-Optic Probing Technique”, **4th Pacific Rim Conference on Lasers and Electro-Optics (CLEO/PR2001)**, paper ThJ2-6, pp. - , Chiba, Japan, July 15-19, 2001. 國科會補助編號 NSC 89-2215-E-036-006
- ★ 48. Tze-An Liu, M. Tani, Gong-Ru Lin, and Ci-Ling Pan, “THz emission characteristics of photoconductive antennas with different gap size fabricated on arsenic-ion-implanted GaAs”, submitted to **SPIE’s 46th Annual Meeting, the International Symposium on Optical Science and Technology, Conference on “Radio Frequency Photonic Devices and Systems II”**, AM226, paper 4490-14, San Diego CA, USA, 29 July-3 August, 2001.
- ★ 47. Gong-Ru Lin* and Yao-Ling Cheng, “A Delay-Time Tunable Actively Mode-Locked Erbium-Doped Fiber Laser System”, **OSA/IEEE Conference on Laser and Electro-Optics (CLEO2001)**, Paper CTuX3, pp. 114-114 , Baltimore, Maryland, May 6-11, 2001.
- ★ 46. Gong-Ru Lin*, Y.-C. Chang, Tze-An Liu, and Ci-Ling Pan, “Tuning the Delay-Time of Passively Mode-Locked Ti:Sapphire/SBR Laser by Using Phase-Discriminating Technology”, **OSA/IEEE Conference on Laser and Electro-Optics (CLEO2001)**, paper CThP7, pp. 160-160, Baltimore, Maryland, May 6-11, 2001. 國科會補助編號 NSC 89-2215-E-036-002
- 45. Gong-Ru Lin* and Y.-C. Chang, “Delay-Line-Free High-Speed Electro-Optic Sampler”, **2nd Joint OSJ-SPIE International Conference on Optical Engineering on Sensing and Nanotechnology (ICOSN2001)**, Session 17, paper. 4416-69, pp. - , Yokohama, Japan, June 6-8, 2001. 國科會補助編號 NSC 89-2215-E-036-002
- ★ 44. Gong-Ru Lin*, and Y.-C. Chang, “Novel Delay-Time Tunable Pulsed Laser Source”, **International Symposium of Optoelectronic, Program on “Laser Diodes and LEDs in Industrial, Measurement, Imaging, and Sensors Applications III (OE10)”**, Photonic West 2001, Conference 4285A, “Laser Diodes and LEDs in Industrial, Measurement, Imaging, and Sensor Applications III”, Session 1, “Control, Ranging, illumination, and High-power Applications”, paper 4285A-05, San Jose, CA, January 20-26, 2001. 國科會補助編號 NSC 89-2215-E-036-002

2000

- 43. T.-A. Liu, M. Tani, Gong-Ru Lin, and C.-L. Pan, “THz Emission Characteristics of Photoconductive Antennas with Different Gap Size Fabricated on Arsenic-Ion-Implanted GaAs”, Proceedings of **2nd International Photonics Conference (IPC2000)**, paper W-S2-A001, pp. 53-55, Hsinchu Taiwan, December 12-15, 2000.
- 42. Gong-Ru Lin*, Y.-C. Chang, Tze-An Liu, and Ci-Ling Pan, “A Novel Delay-Time-Tunable Passively mode-locked Ti:Sapphire Laser”, Proceedings of **2nd International Photonics Conference (IPC2000)**, paper Th-S2-E005, pp. 267-269, Hsinchu Taiwan, December 12-15, 2000.
- 41. Yung-Cheng Chang and Gong-Ru Lin*, “Electro-Optic Sampling of High-Speed Signal by Using an

- Inherently Phase-Tunable Laser Source”, Proceedings of *2nd International Photonics Conference (IPC2000)*, paper Th-S2-E003, pp. 261-263, Hsinchu Taiwan, December 12-15, 2000.
40. Gong-Ru Lin*, Jui-Lin Chang, Wei-Kuo Chen, and Ci-Ling Pan, “Transmission Line Measurements of Nearly Semi-Insulating GaN Diode with Au Contacts”, Proceedings of *2nd International Photonics Conference (IPC2000)*, paper Th-S1-P001, pp. 487-490, Hsinchu Taiwan, December 12-15, 2000.
 39. Jui-Lin Chang and Gong-Ru Lin*, “Continuous-Wave Photocurrent of Thermally Annealed Arsenic-Ion-Implanted GaAs”, Proceedings of *2nd International Photonics Conference (IPC2000)*, paper Th-T1-P015, pp. 580-583, Hsinchu Taiwan, December 12-15, 2000.
 38. Chin-Chia Hsu and Gong-Ru Lin*, “Optical Characterization on Band Structures and Defects of GaAs:As⁺ Different Recipes”, Proceedings of *2nd International Photonics Conference (IPC2000)*, paper Th-T1-P011, pp. 567-570, Hsinchu Taiwan, December 12-15, 2000.
 37. Chin-Chia Hsu and Gong-Ru Lin*, “Optical and Electrical Characterizations of Semi-conducting Silicon-implanted Glass Substrate”, Proceedings of *2nd International Photonics Conference (IPC2000)*, paper Th-T1-P012, Hsinchu Taiwan, pp. 571-573, December 12-15, 2000. (學生論文獎)
 36. Chung-Fei Lee and Gong-Ru Lin*, “The Effect of Frequency Tuning on Pulseswidth and Jitter of a 1.55 μ m Fiber-Pigtailed Gain-Switched Laser Diode”, Proceedings of *2nd International Photonics Conference (IPC2000)*, paper Th-T3-P008, pp. 688-690, Hsinchu Taiwan, December 12-15, 2000.
 35. Gong-Ru Lin*, Jui-Lin Chang, Wei-Kuo Chen, and Ci-Ling Pan “Current-Voltage Analysis of Semi-Insulating GaN Schottky Diodes with Au contacts”, Proceedings of *International Electronics Devices and Materials Symposia (2000 IEDMS)*, Symposium B, paper B5-6, pp. 103-105, December 20-22, 2000, Chung-Li, Taiwan. 國科會補助編號 NSC89-2815-C-036-010-E
 34. Chin-Chia Hsu and Gong-Ru Lin*, “Optical Transmission Spectroscopy of Semi-Insulating GaAs Substrate Implanted by Arsenic Ions at Different Dosages”, Proceedings of *International Electronics Devices and Materials Symposia (2000 IEDMS)*, Symposium B, paper B5-4, pp. 95-98, Chung-Li, Taiwan, December 20-22, 2000. 國科會補助編號 NSC89-2815-C-036-010-E
 33. Gong-Ru Lin* and Y.-C. Chang, “A Novel Optoelectronic Sampling Technique by Using a Delay-Time Tunable Ultrafast Laser Diode”, *Proceeding of 2000 Asia-Pacific Microwave Conference (APMC2000)*, Vol. 1, paper 381, p. 569, Sydney, Australia, 3-6 December 2000. 國科會補助編號 NSC 89-2215-E-036-002
 32. Gong-Ru Lin* and Jui-Lin Chang, “The Transmission Line Measurement of Gold Contact on the Arsenic-Ion-Implanted GaAs After Rapid Thermal Annealing”, *International Symposium on Microelectronics and Assembly (ISMA2000), Advanced Processing Techniques (MS02)*, paper 4227-06, Singapore, November 27- December 2, 2000. 國科會補助編號 NSC 89-2215-E-036-002
 - ★ 31. Gong-Ru Lin* and Y.-C. Chang, “A Novel Electro-Optic Sampling System by Using Delay-Time Tunable Pulsed Laser Sources”, *13th Annual Meeting of IEEE Lasers and Electro-Optics Society 2000 (LEOS 2000)*, MD: Ultrafast Measurements, paper MD4, Rio Grande, Puerto Rico, November 13-17, 2000. 國科會補助編號 NSC 89-2215-E-036-002
 - ★ 30. C.-L. Pan, T.-A. Liu, Gong-Ru Lin and M. Tani, “Multi-Energy Arsenic-Ion-Implanted GaAs Photoconductors for Ultrafast Switching and THz Generation”, *13th Annual Meeting of IEEE Lasers and Electro-Optics Society 2000 (LEOS 2000)*, TuE: Terahertz Optoelectronics I, paper TuE2, Rio Grande, Puerto Rico, November 13-17, 2000. Conference Proceedings - IEEE Lasers and Electro-Optics Society Annual Meeting-LEOS, 1, pp. 179-180, 2000. 國科會補助編號 NSC 89-2215-E-036-002
 29. Gong-Ru Lin* and Y.-C. Chang, “Optoelectronic Control of Continuous Phase-tunable Oscillators for Wideband Phased Array System”, *2000 International Symposium on Antennas and Propagation (ISAP2000)*, Session 3E4: Optical Technology in Antennas, paper RE-0043, Fukuoka, Japan, August 21-25, 2000. 國科會補助編號 NSC 89-2215-E-036-002 (Session Chairman)
 28. Gong-Ru Lin* and Chin-Chia Hsu, “FTIR Analysis of Thermal-annealed GaAs:As⁺ at Different Dosages”, *The 8th Asia Pacific Physics Conference (APPC2000)*, Session DA: Applied Physics, oral paper DA4, Taipei, Taiwan, August 7-10, 2000. 國科會計劃 NSC89-2815-C-036-010-E

- ★ 27. Gong-Ru Lin* and Y.-C. Chang, "Optoelectronic Frequency Discriminated Phase Tuning Technology and Its Applications", *The International Symposia of SPIE, Photonics Taiwan 2000, Optoelectronic Materials and Devices II (PT01)*, paper 4078-110, pp. - , Taipei, Taiwan, July 26-28, 2000. 國科會補助編號 NSC 89-2215-E-036-002

1999

- 26. Y.-J. Lee, T.-A. Liu, Gong-Ru Lin, H.-H. Wu, S. C. Wang, and C.-L. Pan, "Picosecond Single- and Multi-Dose GaAs:As⁺ Photoconductive Devices", *The Proceedings of 1999 International Photonics Conference, IPC'99*, Part. 2, FR-III3-C-2, pp. 807-810, December 1999. 國科會補助編號 NSC 89-2215-E-036-002
- 25. Y.-C. Chang and Gong-Ru Lin*, "Controlling the Relative Delay-Time of Optical Pulse-Train by using a Novel Optoelectronic Phase Shifter", *The Proceedings of 1999 International Photonics Conference, IPC'99*, Part. 2, FR-III6-C-9, pp. 885-888, December 1999. 國科會補助編號 NSC88-2215-E-036-002
- ★ 24. Gong-Ru Lin*, "Continuously Tunable Phase Controller for Microwave Oscillators by Using Optoelectronic Phase-Lock Loop", *International Topical Meeting on Microwave Photonics, MWP'99*, paper MWP#39, Melbourne, Australia, November 17-19, 1999. 國科會補助編號 NSC88-2215-E-036-002
- 23. Gong-Ru Lin*, and Ci-Ling Pan, "Comparison of Optically Excited Terahertz Radiation from Hydrogen- and Arsenic-Ion-Implanted GaAs Substrates", Meeting Abstracts of *1999 Joint International Meeting of the Electrochemical Society, Symposium J4 – State-of-the-art Program on Compound Semiconductors XXXI*, Vol. 99-2, paper. J4-1162, Honolulu, Hawaii, October 17-22, 1999.
- 22. Gong-Ru Lin* and Ci-Ling Pan, "Characterizations of Ion-Implanted GaAs Substrates by Optically Excited Terahertz Radiation", *Proceedings of the Ninth International Symposium on Nondestructive Characterization of Materials*, Sydney, Australia, June 28 to July 2, 1999.
- 21. Gong-Ru Lin*, "A Plastic-Fiber-bundle-based Metrology for Two-Dimension Mapping the Dissolution Rate of Photoresist Film", *Proceedings of the 1999 International Conference on Optical Engineering for Sensing and Nanotechnology (ICOSN'99)*, paper 3740-37, Yokohama, Japan, June 16-18, 1999.
- ★ 20. Gong-Ru Lin*, Ci-Ling Pan, "Effect of Proton Implantation on Optically Excited Terahertz Radiation from GaAs", *IEEE/LEOS Conference on Laser and Electro-Optics (CLEO'99)*, Terahertz Optoelectronics joint session paper JthA6, Maryland USA, May 18-23, 1999. IQEC, International Quantum Electronics Conference Proceedings 1999, pp. 172-173.
- ★ 19. T.-A. Liu, Gong-Ru Lin, Ci-Ling Pan, "Correlation of Carrier Lifetime and Arsenic-antisite Defects in LT-GaAs Grown at Different Substrate Temperature", *The International Symposia of SPIE-Photonics West, Technical Conferences of Optoelectronics'99, Ultrafast Phenomena in Semiconductors III*, paper 3624-08, p. 51, January 27-29, 1999.
- ★ 18. Gong-Ru Lin* and Ci-Ling Pan, "Effect of Thermal Annealing on the Bandedge Absorption spectrum of Arsenic-ion-implanted GaAs", *The International Symposia of SPIE-Photonics West, Technical Conferences of Optoelectronics'99, Photodetectors: Materials and Devices IV*, paper 3629-39, p. 110, January 27-29, 1999.

1998

- 17. L. H. Lai, J. Y. Wang, Y. A. Chen, Gong-Ru Lin, C. L. Pan, and J. W. Hong, "An Investigation of Carrier Lifetime in Porous Silicon". *Proceeding of 1998 International Electron Devices and Materials Symposia (IEDMS'98), Symposium C: Processes and Characterizations of Electronic Materials*, paper C2-4, pp. 250-253, Tainan, Taiwan, December 20-23, 1998.
- 16. Gong-Ru Lin and Ci-Ling Pan, "Characterization of rapid-thermal-annealed arsenic-ion-implanted GaAs by using Fourier transformed infrared spectroscopy", *1998 International Photonics Conference, IPC'98*, paper T-PD-III3, pp. 32-34, December 15-18, 1998.
- 15. Gong-Ru Lin and Ci-Ling Pan, "Ultrafast Optical Generation of Terahertz Electromagnetic Pulses from Radiation-Damaged GaAs", *1998 International Photonics Conference, IPC'98*, paper T-PD-III2, pp. 29-31, December 15-18, 1998.
- ★ 14. Gong-Ru Lin, Wen-Chung Chen, C.-S. Chang, T.-A. Liu, and Ci-Ling Pan, "Characterizations of Material and Ultrafast Properties of Arsenic-ion-implanted GaAs Photoconductors", *Proceedings of IEEE 10th Semiconducting and Insulating Materials Conference, SIMC-X*, paper Tu 2.4, June 1-5, Berkeley, CA,

1998.

- ★ 13. Ci-Ling Pan and Gong-Ru Lin, "Arsenic-Implanted GaAs: An Alternative Material to Low-Temperature-Grown GaAs for Ultrafast Optoelectronic Applications", *The International Symposia of SPIE, Technical Conferences of Optoelectronics'98, Ultrafast Phenomena in Semiconductors II*, paper 3277-24, February 27-29, 1998.

1997

- ★ 12. Gong-Ru Lin, T. M. Hsu, W. C. Lee, and Ci-Ling Pan, "Near-Bandgap Ultrafast Optical Responses of Furnace annealed arsenic-ion-implanted GaAs", *LEOS Conference Proceedings of the 1997 10th IEEE Lasers and Electro-Optics Society Annual Meeting (LEOS'97)*, paper ThBB6, LEOS. Part 2 (of 2), v2, pp. 531-532, San Francisco, CA, USA, Nov 10-13 1997.
- ★ 11. Gong-Ru Lin, C.-L. Pan, Q. Wu, and X. C. Zhang, "Characterization of Arsenic-ion-implanted GaAs by optically Excited Terahertz Radiation", *LEOS Conference Proceedings of the 1997 10th IEEE Lasers and Electro-Optics Society Annual Meeting (LEOS'97)*, paper ThK3, LEOS. Part 2 (of 2), v2, pp. 366-367, San Francisco, CA, USA, Nov 10-13 1997.
- ★ 10. Gong-Ru Lin, T.-S. Hwang, Y.-H. Chuang, S.-C. Wang, and C.-L. Pan, "Optoelectronic-Implementation of a 20 GHz Broadband Microwave Phase Shifter", *LEOS Conference Proceedings of the 1997 10th IEEE Lasers and Electro-Optics Society Annual Meeting (LEOS'97)*, paper ThH4, LEOS. Part 2 (of 2), v2, pp. 345-346, San Francisco, CA, USA, Nov 10-13 1997.
- ★ 9. Gong-Ru Lin, and Ci-Ling Pan, "Ultrafast Furnace-annealed Arsenic-ion-implanted GaAs Photoconductors", *Proceedings of OSA/IEEE Conference on Laser and Electro-Optics (CLEO'97)*, Vol. 11, paper CTuP 27, May 18-23, 1997. Conference Proceedings - Lasers and Electro-Optics Society Annual Meeting-CLEO, v 11, 1997, p. 130.
- ★ 8. Gong-Ru Lin, and Ci-Ling Pan, "Investigations of GaAs implanted with low-dosage arsenic ions as ultrafast photoconductors", *OSA and IEEE/LEOS Conference Proceedings of Ultrafast Electronics and Optoelectronics Topical Meeting, UEO'97*, paper UME 13, March 17-19, 1997. OSA Trends in Optics and Photonics Series 13, 1997, p. 116.

1996

- ★ 7. Gong-Ru Lin, Feruz Ganikhanov, Wen-Chung Chen, C.-S. Chang, and Ci-Ling Pan, "Effect of rapid thermal annealing on carrier lifetime in arsenic-ion-implanted GaAs", *IEEE/LEOS Conference on Lasers and Electro-Optics, CLEO'96*, Anaheim CA, June 2-7, 1996. Conference Proceedings - Lasers and Electro-Optics Society Annual Meeting 1996 p 138.

1995

- 6. T.-M. Cheng, C.-Y. Chang, Gong-Ru Lin, F. Ganikhanov, C.-L. Pan, and J.-H. Huang, "Subpicosecond Carrier Lifetime in Low-Temperature GaAs on (311) substrate", *International Conference on Solid State Devices and Materials, SSDM'95*, pp. 124-126, Osaka Japan, August 21-24, 1995.
- ★ 5. Gong-Ru Lin, Chien-Rong Yang, and Ci-Ling Pan, "Optoelectronic Subharmonic Phase Locking Using as Integrated Optical Modulator as a Frequency Multiplier", *IEEE/LEOS International Conference on Lasers and Electro-Optics, CLEO'95*, paper CThL2, May 22-26, 1995.
- ★ 4. Gong-Ru Lin, Feruz Ganikhanov, Wen-Chung Chen, C.-S. Chang, and Ci-Ling Pan, "Ultrafast Carrier Relaxation in Semi-insulating GaAs Implanted with Arsenic Ions (GaAs:As)", *OSA and IEEE/IEEE Conference—Ultrafast Electronics and Optoelectronics Topical Meeting, UEO'95*, paper UtuE, Mar. 13-17, 1995.
- ★ 3. Gong-Ru Lin, Ci-Ling Pan, and Hsiao-Hua Wu, "Optoelectronic Phase Tracking and Electro-Optic Sampling of Free-Running Microwave Signals up to 20 GHz in a Laser-Diode-Based System", *OSA and IEEE/IEEE Conference—Ultrafast Electronics and Optoelectronics Topical Meeting, UEO'95*, paper UMD, Mar. 13-17, 1995.

1994

- ★ 2. Gong-Ru Lin, Dean-Yu Chyou, Ci-Ling Pan, and Hsiao-Hua Wu, "Electro-optic Phase Tracking of Microwave Signals beyond 18.5 GHz Using an Integrated Electrooptic Modulator", Conference Proceedings-*IEEE/OSA Laser and Electro-Optics Society Annual Meeting (CLEO'94)*, Vol. 8, paper CTHI 3, pp. 318-319, May 8-13, 1994.

1993

- ★ 1. Ci-Ling Pan, C.-S. Chang, Chi-Luen Wang, Gong-Ru Lin, and Hsiao-Hua Wu, "Novel Technique for Optoelectronic Phase Locking of Microwave Signals Using a Laser-Diode-Based Electro-Optic Harmonic Mixer", Digest of the *IEEE/LEOS Summer Topical Meeting on Optical Microwave Interactions*, paper M3.3, pp. 23-24, July 19-21, 1993.

國內學術會議 (142+)

2014

- 161 Cheng-Ting Tsai, Yu-Chieh Chi, and Gong-Ru Lin*, "Suppressing the Colorless Laser Diode Induced Intensity Noise for 256-QAM-OFDM transmission at 40 Gbit/s," *Optics & Photonics Taiwan, the International Conference (OPTIC) 2014*, Submitted, Taichung, Taiwan, Dec. 4-5, 2014.
- 160 Chi-Cheng Yang, Yung-Hsiang Lin, and Gong-Ru Lin*, "Composition Ratio Detuned Si_{1-x}Ge_x Saturable Absorber for Passively Mode-Locked Fiber Laser," *Optics & Photonics Taiwan, the International Conference (OPTIC) 2014*, Submitted, Taichung, Taiwan, Dec. 4-5, 2014.
- 159 Ting-Hui Chen, Yung-Hsiang Lin, and Gong-Ru Lin*, "Bunched Soliton Evolution in Fundamentally and Harmonically Passive Mode-Locked Erbium-Doped Fiber Laser," *Optics & Photonics Taiwan, the International Conference (OPTIC) 2014*, Submitted, Taichung, Taiwan, Dec. 4-5, 2014.
- 158 Bo-Ji Huang, Chung-Lun Wu, Yung-Hsiang Lin, Wei-Hsuan Tseng, Jung-Hung Chang, Po-Han Chang, Chih-I Wu, and Gong-Ru Lin*, "Design and Optical Characterization of Si_{1-x}Ge_x Single-Mode Waveguide on SiO₂ Coated Si Substrate," *Optics & Photonics Taiwan, the International Conference (OPTIC) 2014*, Submitted, Taichung, Taiwan, Dec. 4-5, 2014.
- 157 Chung-Yu Lin, Min-Chi Cheng, Cheng-Tin Tsai, Yu-Chieh Chi, and Gong-Ru Lin*, "Coherently Injecting the Bandwidth Optimized Colorless Laser Diode for Direct 64-QAM OFDM Encoding at 54 Gbit/s," *Optics & Photonics Taiwan, the International Conference (OPTIC) 2014*, Submitted, Taichung, Taiwan, Dec. 4-5, 2014.
- 156 Chih-Hsien Cheng and Gong-Ru Lin*, "Si_xC_{1-x} saturable absorber mode-locked fiber lasers with varying C/Si composition ratio," *Optics & Photonics Taiwan, the International Conference (OPTIC) 2014*, Submitted, Taichung, Taiwan, Dec. 4-5, 2014.
- 155 Yung-Hsiang Lin, Chun-Yu Yang, and Gong-Ru Lin*, "SPM and GVD Managed Erbium-doped Fiber Laser Mode-Locked by Graphene Nano-Sheet," *Optics & Photonics Taiwan, the International Conference (OPTIC) 2014*, Submitted, Taichung, Taiwan, Dec. 4-5, 2014.
- 154 Zu-Kai Weng, Huai-Yung Wang, Cheng-Tin Tsai, Yu-Chieh Chi, and Gong-Ru Lin*, "Linewidth Suppressed Dual-Wavelength Colorless Laser Diode for Optical 64-QAM OFDM," *Optics & Photonics Taiwan, the International Conference (OPTIC) 2014*, Submitted, Taichung, Taiwan, Dec. 4-5, 2014.
- 153 Huai-Yung Wang, Yu-Chieh Chi, Cheng-Ting Tsai, and Gong-Ru Lin*, "Dual-Mode Injected Colorless Laser Diode for Directly Modulated 64-QAM OFDM Transmission," *Optics & Photonics Taiwan, the International Conference (OPTIC) 2014*, Submitted, Taichung, Taiwan, Dec. 4-5, 2014.
- 152 Yu-Chieh Chi, Yu-Chuan Su, Hsiang-Yu Chen, and Gong-Ru Lin*, "Down-Stream Data Eraser Based on a Colorless Laser Diode for 10-Gbit/s DWDM-PON," *Optics & Photonics Taiwan, the International Conference (OPTIC) 2014*, Submitted, Taichung, Taiwan, Dec. 4-5, 2014.

2013

- 151 Yu-Chuan Su, Shi-Ying Lin, Yu-Chieh Chi, and Gong-Ru Lin*, "Partially coherent injection-locking of long-cavity colorless laser diodes for 10-Gbit/s DWDM-PON," 2013 *Optics and Photonics Taiwan, International Conference (OPTIC 2013)*, Oral Paper, 2013-SAT-S0205-O002, Zhongli, Taiwan, Dec. 5-7, 2013.
- 150 Sheng-Fong Lin, Yung-Hsiang Lin, and Gong-Ru Lin*, "Using nano-scale Bi₂Te₃ topological insulator powder as saturable absorber for the mode-locked Erbium doped fiber laser," 2013 *Optics and Photonics Taiwan, International Conference (OPTIC 2013)*, Oral Paper, 2013-FRI-S0303-O001, Zhongli, Taiwan, Dec. 5-7, 2013.
- 149 Sheng-Pin Su, Chung-Lun Wu and Gong-Ru Lin*, "Wavelength converted optical on-off keying inversion from 405 nm to 1550 nm with Si quantum dot doped SiO_x waveguide," 2013 *Optics and Photonics Taiwan, International Conference (OPTIC 2013)*, Poster Paper, 2013-THU-P0201-P007, Zhongli, Taiwan, Dec. 5-7, 2013.
- 148 Min-Chi Cheng, Cheng-Tin Tsai, Gong-Ru Lin*, "Optical 16-QAM OFDM Transmission at 20 Gbit/s by

- Using a Weak-resonant Cavity FPLD Injection-locked Colorless Laser Diode, " **2013 Optics and Photonics Taiwan, International Conference (OPTIC 2013)**, Oral Paper, 2013-FRI-S0203-O003, Zhongli, Taiwan, Dec. 5-7, 2013.
- 147 Jui-Yung Lo, Kaung-Jay Peng, Yung-Hsiang Lin, Chung-Lun Wu, Zhe-Chuan Feng and Gong-Ru Lin*, "Mode-locking of EDFL by using low-temperature PECVD grown few-layer graphene on a side-polished single-mode fiber," **2013 Optics and Photonics Taiwan, International Conference (OPTIC 2013)**, Oral Paper, 2013-FRI-S0303-O003, Zhongli, Taiwan, Dec. 5-7, 2013.
- 146 Cheng-Ting Tsai, Min-Chi Cheng and Gong-Ru Lin*, "64-QAM-OFDM Transmission at 30 Gbit/s by Injection-Locked Weak-Resonant-Cavity Fabry-Ferrot Laser Diode," **2013 Optics and Photonics Taiwan, International Conference (OPTIC 2013)**, Oral Paper, 2013-FRI-S0204-O001, Zhongli, Taiwan, Dec. 5-7, 2013.
- 145 Chih-Hsien Cheng, Wen-Long Yan, Chao-Kuei Lee, Jung-Hung Chang, Chih-I Wu and Gong-Ru Lin*, "The nonlinear optical properties of chemical vapor deposited silicon carbide analyzed by femtosecond Ti:Sapphire laser based Z-scan technology," **2013 Optics and Photonics Taiwan, International Conference (OPTIC 2013)**, Oral Paper, 2013-SAT-S0306-O001, Zhongli, Taiwan, Dec. 5-7, 2013.
- 144 Chung-Lun Wu, Sheng-Pin Su and Gong-Ru Lin*, "Near-infrared free carrier absorption modulation in Si quantum dot doped SiO_x rib waveguide induced by pulsed blue laser illumination," **2013 Optics and Photonics Taiwan, International Conference (OPTIC 2013)**, Oral Paper, 2013-FRI-S0204-O004, Zhongli, Taiwan, Dec. 5-7, 2013. (OPTIC 2013 Student Paper Award).
- 143 Yu-Chieh Chi, Yi-Cheng Li, Cheng-Ting Tsai, Min-Chi Cheng, and Gong-Ru Lin*, " Full-duplex 16/64-QAM-OFDM transmission at 12/18 Gbps with down-stream DFB/EAM and upstream injection-locked colorless FPLD," **2013 Optics and Photonics Taiwan, International Conference (OPTIC 2013)**, Poster Paper 2013-THU-P0201-P027, Zhongli, Taiwan, Dec. 2013
- 2012**
- 142 Yu-Chieh Chi, Hwai Yung Wang, and Gong-Ru Lin*, "40-Gbit/s pulsed return-to-zero on-off-keying transmission based on a self-started pulsed modulation using an optoelectronic feedback loop," **2012 Optics and Photonics Taiwan, International Conference (OPTIC 2012)**, submitted, Taipei, Taiwan, Dec. 6-8, 2012. (OPTIC 2012 Student Paper Award)
- 141 Chung-Lun Wu, and Gong-Ru Lin* "Small-signal gain with zero-phonon assisted recombination lifetime of Si-QD buried in SiO_x waveguide amplifier," **2012 Optics and Photonics Taiwan, International Conference (OPTIC 2012)**, Oral paper. OA-SA-MD5-(6)-1, Taipei, Taiwan, Dec. 6-8, 2012.
- 140 Chih-Hsien Cheng, Chun-Chieh Chen, and Gong-Ru Lin* "Si-QD based LED made by PECVD grown Si_xC_{1-x} with detuning substrate temperature," **2012 Optics and Photonics Taiwan, International Conference (OPTIC 2012)**, OA-FR-MD5-(2)-3, Taipei, Taiwan, Dec. 6-8, 2012.
- 139 Yung-Hsiang Lin, and Gong-Ru Lin*, "A Nano-Scale Graphite Mode-Locked Erbium-Doped Fiber Laser with 650fs Pulsewidth," **2012 Optics and Photonics Taiwan, International Conference (OPTIC 2012)**, Oral paper. OC-FR-BL3-(1)-4, Taipei, Taiwan, Dec. 6-8, 2012. (OPTIC 2012 Student Paper Award)
- 138 Ling-Hsuan Tsai, Chun-Jung Lin, Chih-I Wu, Jung-Hung Chang, Gong-Ru Lin*, "Dual-phase Non-stoichiometric Tin-rich Tin Sulfide thin film by Sputtering deposition," **2012 Optics and Photonics Taiwan, International Conference (OPTIC 2012)**, Oral paper. OA-SA-MD3-(3a)-6, Taipei, Taiwan, Dec. 6-8, 2012.
- 137 Kaung-Jay Peng, Chun-Lun Wu, Yung-Hsiang Lin, and Gong-Ru Lin*, "Nonlinear Transmittance of low temperature PECVD grown graphene on ultra-thin Ni film," **2012 Optics and Photonics Taiwan, International Conference (OPTIC 2012)**, Poster, Taipei, Taiwan, Dec. 6-8, 2012.
- 136 Shih-Ying Lin, Yu-Chieh Chi, Zhi-Wang Liao, Hai-Lin Wang, Gong-Cheng Lin, and Gong-Ru Lin*, "Effect of End-Facet Reflectance on Transmission Error Rate of a 200-GHz channelized Weak-Resonant-Cavity Laser Diode at 2.5Gbit/s," **2012 Optics and Photonics Taiwan, International Conference (OPTIC 2012)**, Oral paper. OB-FR-BL1-(2)-2, Taipei, Taiwan, Dec. 6-8, 2012. (OPTIC 2012 Student Paper Award)
- 135 Yi-Cheng Li, and Gong-Ru Lin*, "Using an Injection-locked WRC-FPLD for optical 16QAM-OFDM Transmission over 25km SMF," **2012 Optics and Photonics Taiwan, International Conference (OPTIC 2012)**, Oral paper. OB-FR-BL1-(1)-1, Taipei, Taiwan, Dec. 6-8, 2012.
134. Chun-Yu Yang, Chung-Lun Wu, Yung-Hsiang Lin, and Gong-Ru Lin*, "Electrochemically Exfoliated Graphene Nanoparticles for Passively Mode-Locked Fiber Lasers," **2012 Optics and Photonics Taiwan,**

International Conference (OPTIC 2012), Poster, Taipei, Taiwan, Dec. 6-8, 2012.

2011

- 133 Chun-Wei Tseng, Yi-Hao Pai, and Gong-Ru Lin* "Surface Morphology Dependent Depolarization Properties of Nano-Porous Alumina", **TACT 2011 International Thin Films Conference (TACT 2011)**, Poster paper, B20110620018, Kenting, Taiwan, Nov. 20-23, 2011.
- 132 Chun-Wei Tseng, Yi-Hao Pai, and Gong-Ru Lin* "Angular Spectral Properties of Tunable Nano-Porous Alumina", **International Photonics Conference 2011 (IPC 2011)**, Poster paper, PE-TH-09, Tainan, Taiwan, Dec. 08-10, 2011.
131. Yung-Hsiang Lin, and Gong-Ru Lin*, "Annealing time dependent Si nanocrystals self-aggregation in Si-rich SiC matrix", **International Photonics Conference (IPC 2011)**, Oral paper. A-SA-IV-9-1, Tainan, Taiwan, Dec. 8-10, 2011.
130. Yi-Cheng Lee, Yu-Chan Lin, and Gong-Ru Lin*, "Comparison of dual and single ring cavity with direct modulation weak resonant cavity Fabry-Perot laser diode self-feedback mode-locked fiber laser at 10 GHz", **International Photonics Conference (IPC 2011)**, Poster paper PC-FR-02, Tainan, Taiwan, Dec. 8-10, 2011.
129. Hung-Yu Tai, and Gong-Ru Lin*, "Intense photoluminescence of silicon-rich silicon carbide films with buried SiC and Si nanocrystals synthesized by PECVD after thermal annealing", **International Photonics Conference (IPC 2011)**, Poster paper. PA-TH-01, Tainan, Taiwan, Dec. 8-10, 2011.
128. Chiao-Ti Lee, and Gong-Ru Lin*, "Enhanced Optical Absorption of Low-temperature PECVD Grown Si-rich $\text{Si}_{1-x}\text{C}_x$ ", **International Photonics Conference (IPC 2011)**, Poster paper. PI-FR-32, Tainan, Taiwan, Dec. 8-10, 2011.
127. Chih-Hsien Cheng, Cheng-Tao Lin, and Gong-Ru Lin*, "Effect of carrier trapping on electroluminescence of Si-QDs embedded Si-rich SiN_x and SiO_x Light Emitting Diodes", **International Photonics Conference (IPC 2011)**, Poster paper. PA-TH-05, Tainan, Taiwan, Dec. 8-10, 2011.
126. Chung-Lun Wu, Yung-Hsiang Lin, and Gong-Ru Lin*, "Tunable and narrow linewidth of Si-QDs luminescence via designed thickness of $\text{SiO}_x/\text{SiN}_x$ distributed Bragg reflector," **International Photonics Conference (IPC 2011)**, Poster paper. PA-TH-06, Tainan, Taiwan, Dec. 8-10, 2011.
125. Chun-Ju Lin, Yu-Chieh Chi, and Gong-Ru Lin*, "Effect of Microwave Driven Power on the Performance of Self-Triggered Harmonic Mode-Locking WRC-FPLD Based 10 Gbit/s RZ Data Generator," **International Photonics Conference (IPC 2011)**, Poster paper. PB-TH-03, Tainan, Taiwan, Dec. 8-10, 2011.
124. Yu-Chieh Chi, and Gong-Ru Lin*, "200 GHz DWDM Channelized RZ Data Transmission with SOA Fiber Laser Injection Mode-locked by Synthesizer-free 10 Gbit/s Self-pulsating EAM," **International Photonics Conference (IPC 2011)**, Oral paper. B-TH-II 1-1, Tainan, Taiwan, Dec. 8-10, 2011.

2010

- 124 Chun-Wei Tseng, Yi-Hao Pai*, and Gong-Ru Lin "Incident Angle Dependent Pore Size/Density of Anti-Reflective Randomized Nano-Porous Alumina/Aluminum Membrane" **Conference of Optoelectronics and Photonics, 2010 (OPT2010)**, Poster paper OPT5-P-067, Tainan, Taiwan, Dec. 3-4, 2010.
123. Hung-Yu Tai, Po-Sheng Wang, Chih-I Wu, and Gong-Ru Lin*, "High-Temperature PECVD Grown Si-rich $\text{a-Si}_x\text{C}_{1-x}$ Film with Enhanced Forming of Silicon Bonding Component," **Conference of Optoelectronics and Photonics, 2010 (OPT2010)**, Oral paper. OPT1-O-07, Tainan, Taiwan, Dec. 3-4, 2010.
122. Chiao-Ti Lee, Po-Sheng Wang, Chih-I Wu, and Gong-Ru Lin*, "Investigation on Brewster angle shift and refractive index of Si-rich $\text{Si}_x\text{C}_{1-x}$ films," **Conference of Optoelectronics and Photonics, 2010 (OPT2010)**, Poster paper. OPT1-P-058, Tainan, Taiwan, Dec. 3-4, 2010.
121. Jung-Jui Kang, Chao-Kuei Lee, and Gong-Ru Lin*, "Repetition-Rate Doubling the Optical Pulse-Train with Fractional Talbot Effect in Time Domain for Injection Mode-Locking SOA Fiber Laser," **Conference of Optoelectronics and Photonics, 2010 (OPT2010)**, Poster paper. OPT3-P-001, Tainan, Taiwan, Dec. 3-4, 2010.
120. Tzu-Chieh Lo, Chun-Chieh Chen, Chih-Hsien Cheng, Ling-Hsuan Tsai, Po-Sheng Wang, Yi-Hao Pai, Chih-I Wu and Gong-Ru Lin*, "Annealing Temperature Dependent Self-assembly of Silicon Nanocrystal in Silicon-rich Silicon Carbide," **Conference of Optoelectronics and Photonics, 2010 (OPT2010)**, Poster paper. OPT1-P-012, Tainan, Taiwan, Dec. 3-4, 2010.
119. Chun-Chieh Chen, Hung-Yu Tai, Po-Sheng Wang, Chih-I Wu, and Gong-Ru Lin*, "Characteristics of Tunable Si/C composition ratio in SiC grown by Ar diluted SiH_4 and CH_4 ," **Conference of Optoelectronics and Photonics, 2010 (OPT2010)**, Poster paper. OPT1-P-013, Tainan, Taiwan, Dec. 3-4, 2010.
118. Chun-Ju Lin, and Gong-Ru Lin*, "Clock-free Harmonic Mode-locking WRC-FPLD based RZ data Generator at 10 Gbit/s," **Conference of Optoelectronics and Photonics, 2010 (OPT2010)**, Poster paper.

- OPT2-P-077, Tainan, Taiwan, Dec. 3-4, 2010.
117. Yi-Cheng Lee, and Gong-Ru Lin*, "Beyond Modulation Bandwidth of Weak-Resonant-Cavity Fabry-Perot Laser Diode Fiber Ring with Strong Self-Seeded Mode-Locking" *Conference of Optoelectronics and Photonics, 2010 (OPT2010)*, Oral paper. OPT3-O-009, Tainan, Taiwan, Dec. 3-4, 2010.
 116. Yung-Hsiang Lin, Chung-Lun Wu, Yi-Hao Pai and Gong-Ru Lin*, "Reducing the Photoluminescent Linewidth of Si Quantum Dot Based Emitter with A Multi-Layer SiN_x/SiO_x Design", *Conference of Optoelectronics and Photonics, 2010 (OPT2010)*, Poster paper. OPT1-O-009, Tainan, Taiwan, Dec. 3-4, 2010.
 115. Hung-Yu Tai, Yung-Hsiang Lin, and Gong-Ru Lin*, "Si nanocrystal based SiO_x/SiN_x multilayer structure light emitting device", *Conference of Optoelectronics and Photonics, 2010 (OPT2010)*, Poster paper. OPT1-P-011, Tainan, Taiwan, Dec. 3-4, 2010.
 114. Chun-Chieh Chen, Chih-Hsien Cheng, Po-Sheng Wang, Chih-I Wu, and Gong-Ru Lin*, "Photoluminescence of PECVD grown a-Si_xC_{1-x} by Suppressing Residual Oxygen with Ar Pre-purge", *Conference of Optoelectronics and Photonics, 2010 (OPT2010)*, Poster paper. OPT1-P-050, Tainan, Taiwan, Dec. 3-4, 2010.
 113. Chih-Hsien Cheng, Gong-Ru Lin*, "Nano-crystalline silicon thin film transistor grown by Ar diluted SiH₄ with detuning the RF plasma power", *Conference of Optoelectronics and Photonics, 2010 (OPT2010)*, Poster paper. OPT1-P-049, Tainan, Taiwan, Dec. 3-4, 2010.
 112. Chung-Lun Wu, and Gong-Ru Lin*, "Gain saturation effects of Si-ncs embedded Si-rich SiO_x multi-wavelength strip-loaded waveguide amplifiers," *Conference of Optoelectronics and Photonics, 2010 (OPT2010)*, Poster paper. OPT2-P-010, Tainan, Taiwan, Dec. 3-4, 2010.
 111. Kuang-Nan Cheng, Yu-Chan Lin, and Gong-Ru Lin*, "Raman and TEM Analysis of Optically Absorbent Polyvinyl Alcohol Film Doped by Carbon Nanotubes", *Conference of Optoelectronics and Photonics, 2010 (OPT2010)*, Poster paper. OPT5-P-022, Tainan, Taiwan, Dec. 3-4, 2010.
 110. Yu-Chieh Chi, and Gong-Ru Lin*, "Phase-noise Characterization of Synthesizer-free RZ-BPSK Generator Triggered with Self-starting Optoelectronic Oscillator", *Conference of Optoelectronics and Photonics, 2010 (OPT2010)*, Poster paper. OPT2-P-020, Tainan, Taiwan, Dec. 3-4, 2010.

2009

109. Yung-Hsiang Lin, Yi-Hao Pai, and Gong-Ru Lin*, "Depolarization Phenomenon of Laser Reflection from Si Nano-Rods", *Conference of Optoelectronics and Photonics Taiwan 2009 (OPT2009)*, Oral paper. CO129, Taipei, Taiwan, Dec. 11- Dec. 12, 2009.
108. Chun-Chieh Chen, Po-Sheng Wang, Chih-I Wu, and Gong-Ru Lin*, "Synthesis of Composition Ratio Detuned Amorphous Silicon Carbide Film by PECVD with Methane and Argon Diluted Silane Gas Mixture", *Conference of Optoelectronics and Photonics Taiwan 2009 (OPT2009)*, Oral paper. IO134, Taipei, Taiwan, Dec. 11- Dec. 12, 2009.
107. Tzu-Chieh Lo, Po-Sheng Wang, Chih-I Wu, and Gong-Ru Lin*, "Photoluminescence and X-ray Photoelectron Spectroscopic Diagnosis on the Degradation of High-Temperature Annealed SiC Film by Oxygen Incorporation", *Conference of Optoelectronics and Photonics Taiwan 2009 (OPT2009)*, Oral paper. IP135, Taipei, Taiwan, Dec. 11- Dec. 12, 2009.
106. Chih-Hsien Cheng, and Gong-Ru Lin*, "Red-Yellow-Green photoluminescence in a-Si_xC_{1-x}:H matrix by detuning the ratio of methane and the annealing temperature", *Conference of Optoelectronics and Photonics Taiwan 2009 (OPT2009)*, Oral paper. AO131, Taipei, Taiwan, Dec. 11- Dec. 12, 2009.
105. Chung-Lun Wu, Cheng-Wei Lian, and Gong-Ru Lin*, "Gain saturation in Si nanocrystal strip-loaded waveguide caused by injecting the 785-nm small-signal", *Conference of Optoelectronics and Photonics Taiwan 2009 (OPT2009)*, Oral paper. BO206, Taipei, Taiwan, Dec. 11 - Dec. 12, 2009.
104. Yu-Chan Lin, Kuen-Cherng Lin, Guo-Hsuan Peng, and Gong-Ru Lin*, "NRZ Injection Mode-Locked Semiconductor Optical Amplifier for 55 fs Soliton Generation", *Conference of Optoelectronics and Photonics, 2009 (OPT2009)*, Oral paper. CO119, Taipei, Taiwan, Dec. 11-12, 2009.
103. Yi-Hung Lin, Gong-Cheng Lin, Hai-Lin Wang, Yu-Chieh Chi, and Gong-Ru Lin*, "WRC-FPLD Based WDM-PON Transmitter Injection-Locked by AWG Sliced and SOA Bleached ASE", *Conference of Optoelectronics and Photonics, 2009 (OPT2009)*, Poster paper. BP017, Taipei, Taiwan, Dec. 11-12, 2009.
102. Yu-Chieh Chi, and Gong-Ru Lin*, "10 Gbit/s Synthesizer-Free Optical RZ Clock and Data Generator based on Self-Started OEO Driven Laser Diode", *Conference of Optoelectronics and Photonics, 2009 (OPT2009)*, Oral paper. BO202, Taipei, Taiwan, Dec. 11-12, 2009.

101. Yi-Hao Pai, Yung-Hsiang Lin, Jai-Lin Tsai, and Gong-Ru Lin*, "Fabrication of Dimension-Tunable Si Nanorod Arrays on Si (100) Substrate with Ultra-Low Reflection", *Conference of Optoelectronics and Photonics, 2009 (OPT2009)*, Submitted, Taipei, Taiwan, Dec. 11-12, 2009.
100. Fan-Shuen Meng, Yi-Hao Pai, and Gong-Ru Lin*, "I-V and Hydrophobic Characteristics of Teflon-Like Film Coated and Surface Roughened Si Solar Cells", *Conference of Optoelectronics and Photonics, 2009 (OPT2009)*, Poster paper. IP060, Taipei, Taiwan, Dec. 11-12, 2009.
99. Kuang-Nan Cheng, Yi-Hao Pai, and Gong-Ru Lin*, "Infrared-Photoluminescence Properties of Iron-Silicide Prepared by Thermal Diffusion Iron Nanoparticles into Si Substrate", *Conference of Optoelectronics and Photonics, 2009 (OPT2009)*, Oral paper. AO134, Taipei, Taiwan, Dec. 11-12, 2009.
98. Jung-Jui Kang, Chao-Kuei Lee, and Gong-Ru Lin*, "Amplitude Equalized 4th-order Frequency Multiplication of SOAFL Pulse Train by Using 10 GHz Gain-Switched FPLD Injection", *Conference of Optoelectronics and Photonics Taiwan 2009 (OPT2009)*, Oral paper. CO117, Taipei, Taiwan, Dec. 11-12, 2009.
97. Yi-Hao Pai, and Gong-Ru Lin*, Characterization of SiO_x Nano-Rod in Anodic Alumina with Bright Photoluminescence, *Annual Conference of Materials Research Society-Taiwan 2009*, Poster paper, Hualien, Taiwan, Nov. 26, 2009.
96. Yi-Hao Pai, C. M. Lee, Fan-Shuen Meng, and Gong-Ru Lin*, Characterization and Preparation of Hydrophobic and Highly Transparent Teflon-like Thin-Films, *Annual Conference of Materials Research Society-Taiwan 2009*, Poster paper, Hualien, Taiwan, Nov. 26, 2009.
95. Yi-Hao Pai, Fan-Shuen Meng, and Gong-Ru Lin*, "Ultralow Reflective Silicon Nano-Rod Based Surface Roughening Solar Cells," *Annual Conference of Materials Research Society-Taiwan 2009*, Poster paper, Hualien, Taiwan, Nov. 26, 2009.

2008

94. Yu-Chan Lin, Jung-Jui Kang, Kuen-Cherng Lin, Chao-Kuei Lee, and Gong-Ru Lin*, "Optical-Injection-Power Optimized and Intra-Cavity-Dispersion Compensated Mode-Locking of Semiconductor Optical Amplifier Fiber Laser", *Conference of Optoelectronics and Photonics Taiwan 2008 (OPT2008)*, poster paper, Taipei, Taiwan, Dec. 5 - Dec. 6, 2008.
93. Kuei-Huei Lin, Jung-Jui Kang, Hsiao-Hua Wu, Chao-Kuei Lee, and Gong-Ru Lin*, "Versatile continuous-wave and short-pulse operation of erbium-doped fiber laser by using semiconductor saturable absorber mirror," *Conference of Optoelectronics and Photonics Taiwan 2008 (OPT2008)*, poster paper, Taipei, Taiwan, Dec. 5 - Dec. 6, 2008.
92. Wei-Chao Chiu, Tse-Ming Yang, Chin-Hung Chen, Ming-Chang M. Lee, and Gong-Ru Lin*, "Measurement of 3rd-order nonlinear optical properties of novel silicon photonic wires", *Optics and Photonics Taiwan 2008*, Sat-S10-03, Taipei, Taiwan, Dec., 2008. **Mr. Wei-Chao Chiu received the Best Student Paper Award**

2007

91. Chung-Hsiang Chang and Gong-Ru Lin*, "Blue and Yellow Electroluminescence of MOSLED Made on Si-rich SiO_x Film with Buried Si Nanoclusters of Different Sizes", *Conference of Optoelectronics and Photonics, 2007 (OPT2007)*, poster paper, Taichung, Taiwan, Nov. 29 - Dec. 1, 2007. (最佳論文獎)
90. Chia-Chi Lin, Hao-Chung Kuo, Peng-Chun Peng, and Gong-Ru Lin*, "Chirp and Error Analyses of a gain-switching VCSEL", *Conference of Optoelectronics and Photonics, 2007 (OPT2007)*, oral paper, Taichung, Taiwan, Nov. 29 - Dec. 1, 2007.
89. Guo-Hsuan Peng and Gong-Ru Lin*, "Mode-Locking of 10%-Reflectivity FPLD based Fiber Ring for 200GHz DWDM Channel Pulse Generation", *Conference of Optoelectronics and Photonics 2007 (OPT2007)*, oral paper, Taichung, Taiwan, Nov. 29 - Dec. 1, 2007.
88. Cheng-Wei Lian, and Gong-Ru Lin*, "Near-Infrared Amplified Spontaneous Emission of Strip-Loaded SiO₂/SiOX/SiO₂ Waveguide with Buried Si Nanocrystals on Si Substrate Pumped by He-Cd Laser", *Conference of Optics and Photonics Taiwan 2007 (OPT 2007)*, oral paper BO-009, Taichung, Taiwan, November 30 - December 1, 2007. (最佳論文獎)
87. Bo-Han Lai and Gong-Ru Lin*, "High-Power Amplification and Compression of a Passively Additive-Pulse Mode-Locked Fiber Laser", *Conference of Optics and Photonics Taiwan 2007 (OPT 2007)*, post paper CP-009, Taichung, Taiwan, November 30 - December 1, 2007.
86. Cheng-Tao Lin and Gong-Ru Lin*, "Effect of Nitrogen Fluence on The Photoluminescence of Silicon Nanocrystals," *Conference of Optics and Photonics Taiwan 2007(OPT2007)*, poster paper CP035,

- Taichung, Taiwan, Nov. 30 - Dec. 1, 2007.
85. Tzu-Kang Cheng, Hai-Lin Wang, Gong-Cheng Lin and Gong-Ru Lin*, "50GHz and 200GHz AWG filtered ASE injection-locked RSOA for WDM-PON upstream transmission", *Conference of Optoelectronics and Photonics, 2007. (OPT2007)*, oral paper, Taichung, Taiwan, Nov. 29 - Dec. 1, 2007.
- 2006**
84. Yu-Sheng Liao and Gong-Ru Lin*, "A side-mode injection locked FPLD based 2.5 Gbit/s DWDM-PON with 22-channel capacity", *Conference of Optics and Photonics Taiwan 2006*, poster paper CO-, NTHU Hsinchu, Taiwan, Dec. 15-16, 2006.
 83. Kun-Chieh Yu, Yu-Sheng Liao, and Gong-Ru Lin*, "Semiconductor optical amplifier based all-optical OC-192 RZ data decision gating with dark optical comb injection", *Conference of Optics and Photonics Taiwan 2006*, Oral paper BO-30, NTHU Hsinchu, Taiwan, Dec. 15-16, 2006.
 82. Gong-Ru Lin*, Jun-Yuan Chang, Hai-Han Lu, and Yu-Sheng-Liao, "Sub-picosecond wavelength tunable L-band mode-locked erbium-doped fiber laser", *Conference of Optics and Photonics Taiwan 2006*, poster paper CP-11, NTHU Hsinchu, Taiwan, Dec. 15-16, 2006.
 81. Gong-Ru Lin* and Ying Tsung Lin, "50-fs pedestal-free Gaussian-shape pulse compression with a pre-chirped Er-doped fiber amplifier", *Conference of Optics and Photonics Taiwan 2006*, poster paper CP-12, NTHU Hsinchu, Taiwan, Dec. 15-16, 2006.
 80. Chun-Jung Lin and Gong-Ru Lin*, "Enhancing nanocrystallite Si electroluminescence by suppressing oxygen desorption in high temperature and low-plasmonic-power PECVD", *Conference of Optics and Photonics Taiwan 2006*, Oral paper AO-67, NTHU Hsinchu, Taiwan, Dec. 15-16, 2006.
 79. Gong-Ru Lin*, Yung-Cheng Chang, and Kun-Chieh Yu, "Dynamic chirp reduction of all-optical converted 10Gbit/s RZ data from injection-locked laser diodes", *Conference of Optics and Photonics Taiwan 2006*, poster paper BP-037, NTHU Hsinchu, Taiwan, Dec. 15-16, 2006.
 78. Kun-Chieh Yu, Yu-Sheng Liao, and Gong-Ru Lin*, "Multimode laser diode injection induced gain-shaping in semiconductor optical amplifier for all-optical 10Gbit/s pulsed RZ generation", *Conference of Optics and Photonics Taiwan 2006*, Oral paper CO-08, NTHU Hsinchu, Taiwan, Dec. 15-16, 2006.
 77. Gong-Ru Lin*, Hao-Chung Kuo, Huang-Shen Lin, and Chih-Chiang Kao, "Effect of rapid annealing condition on size and density of self-assembled Ni nanodots on SiO₂/Si", *Conference of Optics and Photonics Taiwan 2006*, poster paper AP-022, NTHU Hsinchu, Taiwan, Dec. 15-16, 2006.
 76. Gong-Ru Lin*, Chi-Kuan Lin, and Chun-Jung Lin, "Fowler-Nordheim tunneling enhanced electroluminescence in a Si nanocrystal MOSLED with interfacial Si nano-pyramids", *Conference of Optics and Photonics Taiwan 2006*, oral paper AO-39, NTHU Hsinchu, Taiwan, Dec. 15-16, 2006.
 75. Gong-Ru Lin* and Chia Yang Chen, "Improved NIR-to-IR energy transferring efficiency of Si/SiO₂/Er₂O₃ co-sputtered Si-rich SiO_x:Er³⁺", *Conference of Optics and Photonics Taiwan 2006*, poster paper AP-059, NTHU Hsinchu, Taiwan, Dec. 15-16, 2006.
- 2005**
74. Chun-Jung Lin, Chi-Kuan Lin, and Gong-Ru Lin*, "Synthesis of Si Nano-Pyramids at SiO_x/Si Interface for Enhancing Electroluminescence of Si-Rich SiO_x Based MOS Diode", *Conference of Optics and Photonics Taiwan 2005*, oral paper C-SA-IV2-3, Tainan, Taiwan, Dec. 9-10, 2005.
 73. Chi-Ming Hung, Yung-Cheng Chang, Kun-Chieh Yu, and Gong-Ru Lin*, "High-Speed Optical Pulsed Data Pattern Transformation in a Semiconductor Optical Amplifier Gain-modulated by a Reshaped Optical Clock Injection", *Conference of Optics and Photonics Taiwan 2005*, oral paper C-SA-IV2-3, Tainan, Taiwan, Dec. 9-10, 2005.
 72. Huang-Shen Lin, Chih-Chiang Kao, Chun-Jung Lin, Hao-Chung Kuo, Shing-Chung Wang, and Gong-Ru Lin*, "Self-Assembled Ni Nanodot on SiO₂ Film—A Novel Reactive Ion Etching Mask for Si Nanorod Formation on Si Substrate", *Conference of Optics and Photonics Taiwan 2005*, oral paper C-SA-IV2-3, Tainan, Taiwan, Dec. 9-10, 2005.
 71. Kun-Chieh Yu, Chi-Ming Hung, Yung-Cheng Chang, and Gong-Ru Lin*, "A 10GHz Backward Dark-Optical-Comb Injected Semiconductor Optical Amplifier for All-Optical OC-192 NRZ-to-RZ Data Format Conversion", *Conference of Optics and Photonics Taiwan 2005*, oral paper C-SA-IV2-3, Tainan, Taiwan, Dec. 9-10, 2005.
 70. Chia-Yang Chen, Chun-Jung Lin, and Gong-Ru Lin*, "Infrared Photoluminescence of Radio-frequency Magnetron Sputter-grown Erbium Doped Si-rich SiO_x", *Conference of Optics and Photonics Taiwan 2005*,

oral paper A-FR-II4-5, Tainan, Taiwan, Dec. 9-10, 2005.

69. Yu-Sheng Liao, Jin-Wei Shi, Y.-S. Wu, Hao-Chung Kuo, and Gong-Ru Lin*, “Heterodyne Beating Diagnostics of a High-Saturation Power Undoped InP Sandwiched InGaAs p-i-n Photodiode on GaAs”, *Conference of Optics and Photonics Taiwan 2005*, oral paper C-SA-IV2-3, Tainan, Taiwan, Dec. 9-10, 2005.
68. Chun-Jung Lin, Gong-Ru Lin*, Yu-Lun Chueh, and Li-Jen Chou, “Material and Optical Aspects of the CO₂ Laser Annealed Silicon-rich SiO_{1.25} with Buried Silicon Nanocrystals”, *Conference of Optics and Photonics Taiwan 2005*, oral paper C-SA-IV2-3, Tainan, Taiwan, Dec. 9-10, 2005.
67. Ming-Chung Wu, Yung-Cheng Chang, and Gong-Ru Lin*, “Super-Mode Noise Suppression in a 10 GHz Regenerative Mode-Locking of Erbium-Doped Fiber Laser with a Semiconductor optical Amplifier Based High-Pass Filter”, *Conference of Optics and Photonics Taiwan 2005*, oral paper C-SA-IV2-3, Tainan, Taiwan, Dec. 9-10, 2005.
66. I-Hsiang Chiu and Gong-Ru Lin*, “10GHz Dark-optical-comb Injection-Mode-Locked Semiconductor Optical Amplifier Fiber Laser for 400fs and 30nm Tunable Pulse Generation”, *Conference of Optics and Photonics Taiwan 2005*, oral paper C-SA-IV2-3, Tainan, Taiwan, Dec. 9-10, 2005.
65. Ying-Tsung Lin and Gong-Ru Lin*, “48-fs Pulse Generation from Self-Started Additive Pulse Mode-Locked Erbium-Doped Fiber Laser with a Dual-Stage Soliton Compressor”, *Conference of Optics and Photonics Taiwan 2005*, oral paper C-FR-V 2-4, Tainan, Taiwan, Dec. 9-10, 2005.
64. Jun-Yuan Chang, Yu-Sheng Liao, Chi-Ming Hung, Wen-Shing Tsai, Hai-Han Lu, and Gong-Ru Lin*, “A Power Conversion Efficiency Improved L-Band Erbium-Doped Fiber Laser with Coupling-Ratio Controlled Wavelength Tunability”, *Conference of Optics and Photonics Taiwan 2005*, oral paper B-FR-III 3-4, Tainan, Taiwan, Dec. 9-10, 2005. (2005 年光電科技研討會學生論文獎)
63. Yu-Sheng Liao, Hao-Chung Kuo, Kai-Ming Feng, M. Feng, and Gong-Ru Lin*, “Ultralow-Leakage, High-Speed, and High-Saturation-Power In_{0.53}Ga_{0.47}As p-i-n Photodiode Receiver on Metamorphic InGaP Buffered GaAs Substrate”, *Conference of Optics and Photonics Taiwan 2005*, oral paper B-FR-III 3-2, Tainan, Taiwan, Dec. 9-10, 2005.

2004

62. I-Hsiang Chiu, Ming-Chung Wu, Zu-De Gong, Gong-Cheng Lin, Jy-Wang Liaw, and Gong-Ru Lin*, “1.8-ps Mode-Locked Semiconductor Optical Amplifier Fiber Laser Pulse Generated by 60-ps Backward Optical Dark Pulse Injection”, *Conference of Optics and Photonics Taiwan’04*, oral paper C-SA-IV1-2, Chung-Li, Taiwan, Dec. 18-19, 2004.
61. Ming-Chung Wu, Yung-Cheng Chang, Gong-Cheng Lin, Jy-Wang Liaw, and Gong-Ru Lin*, “Suppression of Phase Noise and Supermode Noise in Harmonic Mode-Locked Erbium-Doped Fiber Laser Using Semiconductor Optical Amplifier”, *Conference of Optics and Photonics Taiwan’04*, oral paper C-SA-IV2-3, Chung-Li, Taiwan, Dec. 18-19, 2004.
60. Chun-Jung Lin, Yu-Lun Chueh, Li-Jen Chou, and Gong-Ru Lin*, “Silicon Nanocrystals Synthesized by CO₂ Laser Annealing of Si-Rich SiO₂”, *Conference of Optics and Photonics Taiwan’04*, oral paper A-SA-II-5, Chung-Li, Taiwan, Dec. 18-19, 2004.
59. Yung-Cheng Chang, Yu-Huang Lin, J. H. Chen, and Gong-Ru Lin*, “All-Optical OC-192 3R Regeneration Using Optically Gain-Switched Fabry-Perot Laser Diode”, *Conference of Optics and Photonics Taiwan’04*, oral paper B-SU-VIII4-3, Chung-Li, Taiwan, Dec. 18-19, 2004.
58. Chi-Kuan Lin, Hao-Chung Kuo, M. Feng, Gong-Cheng Lin, Chong-Long Ho, and Gong-Ru Lin*, “A Low-Dark-Current InGaAs Photodetector Made on Metamorphic InGaP Buffered GaAs Substrate”, *Conference of Optics and Photonics Taiwan’04*, oral paper A-SU-III11-6, Chung-Li, Taiwan, Dec. 18-19, 2004.
57. Chia-Yang Chen, Chun-Jung Lin, Gong-Ru Lin*, Hao-Chung Kuo, Yu-Lun Chueh, Li-Jen Chou, Chih-Wei Chang, and Eric Wei-Guang Diau, “Near-Infrared Luminescence of PECVD-Grown Si-Rich SiO_x with Buried Si Nanocrystals”, *Conference of Optics and Photonics Taiwan’04*, oral paper A-SU-II10-7, Chung-Li, Taiwan, Dec. 18-19, 2004.
56. Chi-Kuan Lin, Chun-Jung Lin, and Gong-Ru Lin*, “Silicon Defect and Nanocrystal Related White-Light and Near-Infrared Electroluminescence of Si-Rich SiO₂ Based Metal-Oxide-Semiconductor Diode”, *Conference of Optics and Photonics Taiwan’04*, poster paper PA-SA1-10, Chung-Li, Taiwan, Dec. 18-19, 2004.

55. Kuo-Cheng Yu, Chi-Kuan Lin, Chun-Jung Lin, Chih-Wei Chang, Eric Wei-Guang Diao and Gong-Ru Lin*, "Time-Resolved Photoluminescence and Capacitance-Voltage Analysis of Neutral Oxygen Vacancy Defect in Si Implanted SiO₂ on Si Substrate", *Conference of Optics and Photonics Taiwan'04*, poster paper PA-SA1-50, Chung-Li, Taiwan, Dec. 18-19, 2004.
54. Yu-Sheng Liao, and Gong-Ru Lin*, "all-optical clock recovery efficiency from pattern effect by using mode-locked semiconductor optical amplifier fiber laser", *Conference of Optics and Photonics Taiwan'04*, poster paper PC-SA1-10, Chung-Li, Taiwan, Dec. 18-19, 2004.
53. Yu-Huang Lin, Kun-Chieh Yu, and Gong-Ru Lin*, "Mode Beating Noise Suppression of a Mutually Injection-Locked Fabry-Perot Laser Diode and Erbium-Doped Fiber Amplifier Link", *Conference of Optics and Photonics Taiwan'04*, poster paper PB-SU1-02, Chung-Li, Taiwan, Dec. 18-19, 2004.
52. Yu-Huang Lin and Gong-Ru Lin*, "Theory of a Mutually Injection-Locked Fabry-Perot Laser Diode and Erbium-Doped Fiber Amplifier Link", *Conference of Optics and Photonics Taiwan'04*, poster paper PB-SU1-70, Chung-Li, Taiwan, Dec. 18-19, 2004.
51. Yu-Huang Lin, Yung-Cheng Chang, J. H. Chen, and Gong-Ru Lin*, "An Injection-Locked Fabry-Perot Laser Diode Based Pseudo-Return-to-Zero Data Format Generator", *Conference of Optics and Photonics Taiwan'04*, poster paper PB-SU1-13, Chung-Li, Taiwan, Dec. 18-19, 2004.
50. Kuo-Cheng Yu, Chi-Kuan Lin, Hong-Zhi Xie, Chun-Jung Lin, Tze-An Liu, Ci-Ling Pan, and Gong-Ru Lin*, "Si-Nanocrystal-Enhanced Photoconductivity of Silicon-Implanted Quartz", *Conference of Optics and Photonics Taiwan'04*, poster paper PA-SA1-51, Taipei, Taiwan, Dec. 18-19, 2004.
49. Kuo-Cheng Yu, Chun-Jung Lin, and Gong-Ru Lin*, "Characterizing the dielectric constant and defect density on thermally annealed Si-Ion-implanted SiO₂/Si substrate by capacitance-voltage analysis and continuous wave photoluminescence", *The 2004 Physical Society of Republic of China (PSROC) Annual Meeting*, paper. PE-73, 物理雙月刊, Vol. , No. , pp. , Hsinchu, Taiwan, February 9-10, 2004.
48. Chun-Jung Lin, Kuo-Cheng Yu, and Gong-Ru Lin*, "The density and lifetime characterization of oxygen vacancy and nanocrystallite Si precursor defects in thermally annealed multi-Energy Si⁺ implanted SiO₂ by time-resolved photoluminescence and capacitance-voltage analysis", *The 2004 Physical Society of Republic of China (PSROC) Annual Meeting*, paper. TP-4, 物理雙月刊, Vol. , No. , pp. , Hsinchu, Taiwan, February 9-10, 2004.

2003

47. Chun-Jung Lin, Kuo-Cheng Yu, Hao-Chung Kuo, and Gong-Ru Lin*, "The defect-related blue-green photo- and electro-luminescence of thermally annealed Si⁺ implanted SiO₂", *Conference of Optics and Photonics Taiwan'03*, paper , Taipei, Taiwan, Dec. 25-26, 2003.
46. Gong-Ru Lin*, Chun-Jung Lin, and Kuo-Chen Yu, "Determination of defect category and concentration in thermally annealed Si⁺ implanted SiO₂ using time-resolved photoluminescence and capacitance-voltage analysis", *Conference of Optics and Photonics Taiwan'03*, paper , Taipei, Taiwan, Dec. 25-26, 2003.
45. Yung-Cheng Chang, Gong-Cheng Lin, Jy-Wang Liaw, and Gong-Ru Lin*, "Tunable dual-wavelength and dual-repetition-rate CW injection locking induced gain-switching of Fabry-Pérot laser diode", *Conference of Optics and Photonics Taiwan'03*, paper , Taipei, Taiwan, Dec. 25-26, 2003.
44. Gong-Ru Lin*, Jung-Rung Wu, Gong-Cheng Lin, Jy-Wang Liaw, I-Ming Liu, Chong-Long Ho, Yao-Shing Chen, "40-GHz erbium-doped fiber laser with purely sinusoidal-modulated Fabry-Pérot laser diode", *Conference of Optics and Photonics Taiwan'03*, paper , Taipei, Taiwan, Dec. 25-26, 2003.
43. Yu-Huang Lin, Yung-Cheng Chang, Yu-Sheng Liao, Chong-Long Ho, and Gong-Ru Lin*, "External feedback injection controlled 2.5gbps on/off keying of a single-mode gain-switched laser diode", *Conference of Optics and Photonics Taiwan'03*, paper , Taipei, Taiwan, Dec. 25-26, 2003. (2003 年光電科技研討會學生論文獎)
42. Pai-Shen Hsueh, Hsiao-Hua Wu, Gong-Cheng Lin, and Gong-Ru Lin*, "The Frequency Detuning Characteristics of Optical Injection Rational Harmonic Mode-Locked Semiconductor Optical Amplifier Fiber Ring Laser Using Gain-Switched Laser Diode", *Conference of Optics and Photonics Taiwan'03*, paper , Taipei, Taiwan, Dec. 25-26, 2003.
41. Kuo-Cheng Yu, Chun-Jung Lin, M.-J. Ou-yang, Hao-Chung Kuo, and Gong-Ru Lin*, "Pumping intensity dependent red-shift micro-photoluminescence of silicon-ion-implanted quartz induced by anomalous carrier transfer between self-coupled Si nanocrystals", *Conference of Optics and Photonics Taiwan'03*, paper ,

Taipei, Taiwan, Dec. 25-26, 2003. (2003 年光電科技研討會學生論文獎)

40. Gong-Ru Lin*, Yu-Sheng Liao, and Gong-Cheng Lin, “5GHz harmonic mode-locking of semiconductor optical amplifier by backward sub-bandgap wavelength injection induced cross-gain modulation”, *Conference of Optics and Photonics Taiwan’03*, paper , Taipei, Taiwan, Dec. 25-26, 2003.
39. Yu-Sheng Liao, Wen-Chin Lee, Chong-Long Ho, Gong-Cheng Lin, Jy-Wang Liaw, I-Ming Liu, Yao-Shing Chen, Hao-Chung Kuo, and Gong-Ru Lin*, “The performance of a 10GBPS hybrid-integrated oc192 transceiver using fr4 printed circuit board and Fabry-Perot laser diode on silicon bench”, *Conference of Optics and Photonics Taiwan’03*, paper , Taipei, Taiwan, Dec. 25-26, 2003.

2002

38. Yung-Cheng Chang, Y. Lai, and Gong-Ru Lin*, “Comparison of Actively and Regeneratively Mode-Locked Er-Doped Fiber Lasers with PLL Phase Shifters”, *Conference of Optics and Photonics Taiwan’02*, paper TG1-2, Taipei, Taiwan, Dec. 12-13, 2002.
37. Pai-Shen Hsueh, Shih-Kai Lee, and Gong-Ru Lin*, “A GSLD Seeded High-Repetition-Rate Mode-Locking of 1.3 um SOA Fiber Ring Laser”, *Conference of Optics and Photonics Taiwan’02*, paper T4-203, Taipei, Taiwan, Dec. 12-13, 2002.
36. Gong-Ru Lin* and Chun-Jung Lin, “The Defect Enhanced Photoconductive Response in Silicon-Implanted Borosilicate Glass”, *Conference of Optics and Photonics Taiwan’02*, paper FC4-4, Taipei, Taiwan, Dec. 12-13, 2002.
35. Jung-Rung Wu and Gong-Ru Lin*, “Optical Pulse Injection 10 GHz Rational Harmonic Mode-Locking of Erbium-Doped Fiber Laser”, *Conference of Optics and Photonics Taiwa’02*, paper FD3-2, Taipei, Taiwan, Dec. 12-13, 2002.
34. Gong-Ru Lin*, Shih-Kai Lee, and Yung-Cheng Chang, “A Low-Cost Fabry-Perot Laser Diode Filtering of Er-Doped Fiber Laser”, *Conference of Optics and Photonics Taiwan’02*, paper TG1-4, Taipei, Taiwan, Dec. 12-13, 2002.
33. Yung-Cheng Chang and Gong-Ru Lin*, “Optimization of Microwave Phase-Locked Loop Phase Shifter for Delay-Time Control of Ultrafast Laser”, *Conference of Optics and Photonics Taiwan’02*, paper PD-10, Taipei, Taiwan, Dec. 12-13, 2002.
32. Shih-Kai Lee and Gong-Ru Lin*, “Rational Harmonic Mode-locked TWSOA Ring Laser via Optical Pulse Injection”, *Conference of Optics and Photonics Taiwa’02*, paper PD-11, Taipei, Taiwan, Dec. 12-13, 2002.
31. Shi-Kai Lee, Gong-Cheng Lin, Kuei-Huei Lin, Jy-Wang Liaw, and Gong-Ru Lin*, “Rising Time Analysis of Traveling-Wave Semiconductor Optical Amplifier”, *Conference of Optics and Photonics Taiwan’02*, paper PD-19, Taipei, Taiwan, Dec. 12-13, 2002.
30. Gong-Ru Lin*, Chin-Chia Hsu, and Shi-Ron Lin, “The Negative Differential Resistance Effect of Silicon-Implanted Borosilicate Glass”, *The 2002 Physical Society of Republic of China (PSROC) Annual Meeting*, Session E—Optics and Optoelectronics, paper. E001, Taichung, Taiwan, Feb. 4-6, 2002
29. Tze-An Liu, Masahiko Tani, Gong-Ru Lin*, and Ci-Ling Pan, “THz-radiation performance from Multi-energy arsenic-ion-implanted GaAs and semi-insulating GaAs fabricated dipole antennas”, *The 2002 Physical Society of Republic of China (PSROC) Annual Meeting*, Session E—Optics and Optoelectronics, paper. E001, Taichung, Taiwan, Feb. 4-6, 2002

2001

28. Gong-Cheng Lin, Kuei-Huei Lin, and Gong-Ru Lin*, “A Low-Loss Tipped Fiber Splicing Process for Constructing Erbium-Doped Fiber Laser”, *Conference of Optics and Photonics/Taiwan’01*, Poster paper P43, Kaohsiung, Taiwan, December 13-14, 2001.
27. Gong-Ru Lin* and Jing-Hsyang Horng, “Plastic-Fiber-Bundle-Based Photoresist Dissolution Mapper”, *Conference of Optics and Photonics/Taiwan’01*, Poster paper P90, Kaohsiung, Taiwan, December 13-14, 2001.
26. Shr-Hsiung Hung and Gong-Ru Lin*, “A Compact Electro-Optic Sampling System with Voltage-Controlled Microwave Delay-Time-Tuner”, *Conference of Optics and Photonics/Taiwan’01*, Oral paper FD1-6, Kaohsiung, Taiwan, December 13-14, 2001.
25. Shih-Kai Lee, Gong-Ru Lin*, and Kuei-Huei Lin, “Distortion of Picosecond Pulse in Traveling-Wave Semiconductor Optical Amplifier”, *Conference of Optics and Photonics/Taiwan’01*, Oral paper TD2-7, Kaohsiung, Taiwan, December 13-14, 2001.

24. Yung-Cheng Chang, Gong-Ru Lin*, Yao-Ling Cheng, and Yinchieh Lai, "Actively Mode-locked Erbium-Doped Fiber Laser with Inherent Phase-Shift-Keying Function", *Conference of Optics and Photonics/Taiwan'01*, Oral paper TD2-3, Kaohsiung, Taiwan, December 13-14, 2001.
23. Gong-Ru Lin* and Chung-Fei Lee, "Nearly Single-Mode Wavelength-Tunable Erbium-Doped Fiber Laser Controlled by Intracavity Feedback-Injected Fabry-Perot Laser Diode", *Conference of Optics and Photonics/Taiwan'01*, Oral paper FC3-7, Kaohsiung, Taiwan, December 13-14, 2001.
22. Gong-Ru Lin*, Chang-Hsing Chen, and S.-C. Wang, "Comparison of High-Resistive ZnO Semiconductor Films Sputtered on Different Substrates", *Conference of Optics and Photonics/Taiwan'01*, Poster paper P14, Kaohsiung, Taiwan, December 13-14, 2001.
21. Gong-Ru Lin* and Chin-Chia Hsu, "Novel Silicon-Rich SiO₂ Photoconductor", *Conference of Optics and Photonics/Taiwan'01*, Oral paper TA4-3, Kaohsiung, Taiwan, December 13-14, 2001.
20. Gong-Ru Lin*, Chang-Hsing Chen, Yi-Chao Wang, Wen-Ching Shih, Mu-Shiang Wu, and S. -C. Wang, "Comparison of High-Resistive ZnO films on Different Substrates Grown by Magneto-Assistant Sputtering", *The 2001 Physical Society of Republic of China (PSROC) Annual Meeting*, paper. Dd5, 物理雙月刊 Vol. 23, No. 1, pp. 133, Taipei, Taiwan, February 12-14, 2001.
19. Chin-Chia Hsu and Gong-Ru Lin*, "Characterization of Buried Si Nanocrystals in Borosilicate Glass Substrate", *The 2001 Physical Society of Republic of China (PSROC) Annual Meeting*, paper. Da6, 物理雙月刊 Vol. 23, No. 1, pp. 63, Taipei, Taiwan, February 12-14, 2001.

1999

18. Y.-C. Chang and Gong-Ru Lin*, "Demonstration and Optimization of the Optoelectronically controlled Microwave Phase Shifters", *The Proceedings of 2nd Radio Science Symposium*, paper D-4, December 20-21, 1999. 國科會補助編號 NSC 89-2215-E-036-002
17. Gong-Ru Lin and Ci-Ling Pan, "Optoelectronic Generation of THz Electromagnetic Pulses from GaAs:H⁺", *Proceedings of 1999 Annual Meeting of the Physical Society of R. O. C. (Physics'99)*, paper Ea 1, Vol. 21, No. 1, p. 113, February 4-5, 1999.

1997

16. T.-S. Hwang, Gong-Ru Lin*, S.-C. Wang, and Ci-Ling Pan, "Optoelectronic Implementation of a Broadband (≥ 20 GHz) and Continuously Tunable Microwave Phase Shifters", *Proceedings of Optics and Photonics /Taiwan'97*, Thu-III-C-3, pp. 413-416, December 11-12, 1997.
15. Gong-Ru Lin, T. A. Liu, and T. M. Usu, W. C. Lee, and Ci-Ling Pan, "Effect of Growth Temperature on Ultrafast Optical Properties and Carrier Dynamics of LT-GaAs Grown by Molecular Beam Epitaxy", *Proceedings of Optics and Photonics /Taiwan'97*, Fri-I-D-5, pp. 89-92, December 11-12, 1997.
14. Gong-Ru Lin and Ci-Ling Pan, "Characterization of Proton-Bombarded GaAs by Optically-excited Terahertz Radiation", *Proceedings of Optics and Photonics /Taiwan'97*, Thu-III-B-4, pp. 379-382, December 11-12, 1997.
13. Gong-Ru Lin, Ci-Ling Pan, W.-C. Chen, C.-S. Chang, S.-C. Chou, K.-H. Wu, T.-M. Hsu, W.-C. Lee, "Ultrafast Optical Characterization of Furnace-annealed Arsenic-ion-implanted GaAs", *Conference Proceedings, Proceedings of Annual Meeting of the Physical Society of R. O. C., Physics'97*, Fc2, January 29, 1997.

1996

12. T.-S. Hwang, Gong-Ru Lin, Y.-H. Chuang, S.-C. Wang, and Ci-Ling Pan, "16 GHz 光電鎖相式微波相移器", *Proceedings of Photonics /Taiwan'96*, FRC-E-5, pp. 223-225, December, 1996.
11. Gong-Ru Lin, and Ci-Ling Pan, "低劑量砷離子佈植砷化鎵超快光導特性之研究", *Proceedings of Photonics /Taiwan'96*, FRC-E-4, pp. 220-222, December, 1996.
10. Gong-Ru Lin, and Ci-Ling Pan, "爐管退火之砷離子佈植砷化鎵超快光導開關", *Proceedings of Photonics /Taiwan'96*, FRC-E-3, pp. 217-219, December, 1996.
9. Gong-Ru Lin, Ci-Ling Pan, Q. Wu, and X.-C. Zhang, "使用砷離子佈植砷化鎵產生 THz 輻射瞬波之研究", *Proceedings of Photonics /Taiwan'96*, FRC-E-1, pp. 211-213, December, 1996.
8. S.-C. Liu, J.-M. Hsieh, Y.-H. Chuang, Gong-Ru Lin, and Ci-Ling Pan, "光電鎖相式超短脈衝雷射時序紊亂

度抑制系統”, *Proceedings of Photonics /Taiwan’96*, FRC-C-6, pp. 195-197, December, 1996.

7. Gong-Ru Lin, Shi-Jie Yan, Yan-Kuang Chen, C.-S. Chang, and Ci-Ling Pan, “External Electro-optic Sampling of a Proton-bombarded GaAs Photoconductive Switch”, *Proceedings of 第四屆超快光學與光電子學研討會*, Paper P-III-4, May 17, 1996.
6. Chia-Wen Tsai, Gong-Ru Lin, Jia-Min Shieh, S. C. Wang, and Ci-Ling Pan, “Measurement of RF Standing Wave on a GaAs Microstrip Transmission Line Using a Laser-diode-based Optoelectronic Phase-tracking System”, *Proceedings- 第四屆超快光學與光電子學研討會*, Paper P-III-3, May 17, 1996.

1995

5. Gong-Ru Lin, F. Ganikhanov, W.-C. Chen, C.-S. Chang, and Ci-Ling Pan, “Effective of Rapid Thermal Annealing on Carrier Lifetime in Arsenic-ion-implanted GaAs”, *Proceedings of 半導體、光纖與積體光電研討會*, paper SO1-2, December 16, 1995.
4. Gong-Ru Lin, Feruz Ganikhanov, Ci-Ling Pan, T.-M. Cheng, and C.-Y. Chang, "Ultrafast Carriers Dynamics of GaAs Grown by Low Temperature Molecular Beam Epitaxy", *物理雙月刊*, Vol. 17, No. 1, *Proceedings of 1995 Annual Meeting of the Physics Society of R. O. C., Physics'95*, p. 158, Feb. 1995.
3. Gong-Ru Lin, Wen-Chung Chen, C.-S. Chang, Ci-Ling Pan, "Electrical Characterization of Arsenic-Ion-Implanted Semi-Insulating GaAs", *物理雙月刊*, Vol. 17, No. 1, *Proceedings of 1995 Annual Meeting of the Physics Society of R. O. C., Physics'95*, pp. 158-159, Feb. 1995.

1994

2. G.-R. Lin, C.-L. Pan, and H.-H. Wu, “Optoelectronic Phase tracking and Electro-optic Sampling of Free-running Microwave Signals up to 20 GHz in a Laser-diode-based System”, *Proceedings of 超快光學子學及應用研討會*, paper C4, December 17, 1994.
1. G.-R. Lin, F. Ganikhanov, W.-C. Chen, C.-S. Chang, C.-L. Pan, “Ultrafast Carrier Relaxation in Semi-insulating GaAs Implanted with Arsenic ions (GaAs:As⁺)”, *Proceedings of 超快光學子學及應用研討會*, paper C4, December 17, 1994.

(C) 專書及專書論文

6. Gong-Ru Lin*, Yu-Chuan Su, and Yu-Chieh Chi “Long-cavity Colorless Laser Diodes for OOK/OFDM Transmission in DWDM-PON,” Springer, In press, 2014.
5. Yung-Hsiang Lin, and Gong-Ru Lin*, “Application of graphite nano-particle in ultrafast fiber lasers”, in “Graphite: properties, occurrences and uses”, Nova Science Publishers Inc., 2013.
4. Gong-Ru Lin, and Ci-Ling Pan, “Comparison of Optically Excited Terahertz Radiation from Hydrogen- and Arsenic-Ion-Implanted GaAs Substrates”, in “*State-of-the-art Program on Compound Semiconductors (SOTAPOCS XXXI)*”, Vol. 99-17, pp. 50-57, D. N. Buckley, S. N. G. Chu, and F. Ren Ed., Electrochemical Society INC. Press, New Jersey, October, 1999.
3. Ci-Ling Pan, Gong-Ru Lin, Jia-Min Shieh, Chia-Wen Tsai, S.-C. Wang, and Hsiao-Hua Wu, “Electro-Optic Characterization of Microwave Standing Waves in a GaAs Transmission Line by Using a Novel Phase Analyzing Technique”, in *Current Research on Optical Materials, Devices and Systems in Taiwan, Selected Topics in Electronic and Systems*, Vol. 12, pp. 145-158, S. Chi and T. P. Lee Ed., World Scientific Publishing Co Ltd., 1998
2. Gong-Ru Lin, “Arsenic-ion-implanted GaAs – A New Class Material for Ultrafast Optoelectronic Applications”, *PhD. Dissertation*, National Chiao Tung University Press, December 1996.
1. Gong-Ru Lin, “Study of Photoconductive Switches by Electro-Optic Sampling”, *Master Thesis*, National Chiao Tung University Press, July 1990.

(G) Conference Services

2013

4. **Steering Committee**, “2013 Conference on Asia Pacific Microwave Photonics (APMP2013)”, Gwangju,

	Korea, Apr. 22-24, 2013.
	3. Technical Program Committee Member, “ <i>The 2013 IEEE International Topical Meeting on Microwave Photonics (MWP2013)</i> ”, Texas, USA, Oct. 28-31, 2013.
	2. Steering Committee , “ <i>2013 10th Pacific Rim Conference on Lasers and Electro-Optics (CLEO-PR2009)</i> ”, Kyoto, Japan, Jun. 30 - Jul. 4, 2013.
	1. Technical Program Committee Co-Chair , “ <i>2013 Conference on Asia Pacific Microwave Photonics (APMP2013)</i> ”, Gwangju, Korea, Apr. 22-24, 2013.
2012	5. Technical Program Committee Member, “ <i>2012 International Photonics Conference (IPC2012)</i> ”, NTU, Taipei, Taiwan, Dec. 4-6, 2012.
	4. Technical Program Committee Session Sc2 Co-Chair , “ <i>Asia Communications and Photonics Conference (ACP2012)</i> ”, Guangzhou (Canton), China, Nov. 7-10, 2012
	3. Technical Program Committee Member, “ <i>2012 SPIE Symposium on Photonics Europe (PE 2012)</i> ”, Brussels, Belgium, April 16-19, 2012.
	2. Technical Program Committee Session Sc2 Co-Chair , “ <i>2012 Wireless and Optical Communication Conference (WOCC 2012)</i> ”, Kaohsiung, Taiwan, April 19-21, 2012.
	1. Steering Committee , “ <i>2011 Conference on Asia Pacific Microwave Photonics (APMP2012)</i> ”, Kyoto, Japan, Oct. 18-21, 2012.
2011	5. Technical Program Committee Member, “ <i>2011 International Photonics Conference (IPC2011)</i> ”, NCKU, Tainan, Taiwan, Dec. 8-10, 2011.
	4. Technical Program Committee Member, “ <i>16th Opto-Electronics and Communications Conferences (OECC2011)</i> ”, Invited Talk, NSYSU, Kaohsiung, Taiwan, Jul. 4-8, 2011.
	3. Technical Program Committee Member, “ <i>International Conference on Advanced Infocomm Technology (ICAIT 2011)</i> ”, Jul. 11-14, Wuhan, China.
	2. Steering Committee , “ <i>2011 9th Pacific Rim Conference on Lasers and Electro-Optics (CLEO-PR2009)</i> ”, Sydney, Australia, Aug. 29 - Sep. 1, 2011.
	1. Steering Committee , “ <i>2011 Conference on Asia Pacific Microwave Photonics (APMP2011)</i> ”, Singapore, Oct. 18-21, 2011.
2010	5. Technical Program Committee Chair , “ <i>2010 International Conference on Optics and Photonics in Taiwan (OPT’10)</i> ”, Session: Optical Fiber and Optical Waveguide System, Dec. 3-4, 2010, Singapore.
	4. Technical Program Committee Member, “ <i>2010 Photonics Global Conference (PGC2010)</i> ”, Dec. 14-16, 2010, Singapore.
	3. Technical Program Committee Member, “ <i>2010 IEEE/Photonics Asia Communications and Photonics Conference and Exhibition (ACP2010)</i> ”, Session: Passive Components & Fiber-Based Devices (PCFD), Shanghai, China, December 9-11, 2010.
	2. Technical Program Committee Member, “ <i>2010 16th Microoptics Conference (MOC2010)</i> ”, NCTU, Hsinchu, Taiwan, Oct. 31 – Nov. 3, 2010.
	1. Technical Program Committee Member, “ <i>International Conference on Advanced Infocomm Technology (ICAIT 2010)</i> ”, Hainan, China, Jul. 20-22, 2010.
	1. Steering Committee , “ <i>2010 Conference on Asia Pacific Microwave Photonics (APMP2010)</i> ”, Hong Kong, Apr. 26-28, 2010.
2009	6. Technical Program Committee Member, “ <i>209 IEEE/Photonics Asia Communications and Photonics Conference and Exhibition (ACP2009)</i> ”, Session: Passive Components & Fiber-Based Devices (PCFD), Shanghai, China, December 9-11, 2010.
	5. Technical Program Committee Member, “ <i>2009 IEEE/LEOS Optical MEMS and Nanophotonics</i> ”, Aug. 16-20, 2009, Clearwater Beach, Florida, USA.
	4. Technical Program Committee Member, “ <i>14th Opto-Electronics and Communications Conferences (OECC2009)</i> ”, Session: Optical Signal Processing, Hong Kong, Jul. 13-17, 2009.
	3. Steering Committee , “ <i>2009 8th Pacific Rim Conference on Lasers and Electro-Optics (CLEO-PR2009)</i> ”, Shanghai, China, Aug. 30 - Sep. 3, 2009.

	<ol style="list-style-type: none"> 2. Technical Program Committee Member, “<i>International Conference on Advanced Infocomm Technology (ICAIT 2009)</i>”, Jul. 7-9, Xi’An, China. 1. Steering Committee, “<i>2009 Conference on Asia Pacific Microwave Photonics (APMP2009)</i>”, Beijing, China, April 22-24, 2009.
2008	<ol style="list-style-type: none"> 4. Technical Program Committee Chair, “<i>2008 Optics and Photonics Taiwan (OPT’08)</i>”, Session: Optical Fiber and Optical Waveguide System, Dec. 14-16, 2010, Singapore. 3. Technical Program Committee Member, “<i>2008 IEEE/LEOS Optical MEMS and Nanophotonics</i>”, Aug. 11-14, 2008, Freiburg, Germany. 2. International Organising Committee Member, “<i>The 2008 IEEE International Topical Meeting on Microwave Photonics jointly held with the 2008 Asia-Pacific Microwave Photonics Conference (MWP2008+APMP2008)</i>”, Gold Coast, Australia, Oct. 1-3, 2008. 1. Session Chair, “<i>2008 Asia-Pacific Optical and Wireless Communications Conference and Exhibition (APOC 2008)</i>”, Hangzhou, China, October 29, 2008.
2007	<ol style="list-style-type: none"> 2. Technical Program Committee Chair, “<i>5th IEEE/LEOS Workshop on Fibers and Optical Passive Components (WFOPC2007)</i>”, NTU, Taipei, Taiwan, Dec. 5-7, 2007. 1. Session Chair, “<i>7th IEEE International Conference on Nanotechnology (IEEE-NANO 2007)</i>”, Hong Kong, Aug. 2-5, 2007. 1. Technical Program Committee Member, “<i>2007 OSA Topical Conference on Nanophotonics</i>”, Hangzhou, China, Jun. 18-21, 2007.
(H) International Society Committee Services	
2013	<ol style="list-style-type: none"> 1. 2013~now, Fellow Committee, SPIE
2012	<ol style="list-style-type: none"> 2. 2012~now, Traveling Lecturer, OSA 1. 2012~now, Visiting Lecturer, SPIE
2011	<ol style="list-style-type: none"> 4. 2002~2013, Member & Education Services Council Member, OSA 3. 2002~2013, MES Awards & Grants Subcommittee Member, OSA 2. 2002~2013, Teacher Member Category Subcommittee, OSA 1. 2002~2013, IEEE Membership Council Committee
2010	<ol style="list-style-type: none"> 6. 2002~2013, Member & Education Services Council Member, OSA 5. 2002~2013, IEEE Membership Council Committee 4. 2002~2013, Membership Subcommittee, OSA 3. 2002~2013, Grants & Awards Subcommittee, OSA 2. 2010~2013, IEEE Photonics Society Board of Governors (BoG) Member 1. 2008-2010, Chair of IEEE Photonics Taipei Chapter
2009	<ol style="list-style-type: none"> 6. Member & Education Services Council Member, OSA 5. 2002~2013, IEEE Membership Council Committee 4. 2008-2010, Chair of IEEE Photonics Taipei Chapter 3. 2009~2013, Member and Education Services Council, OSA 2. 2009~2013, Member-at-large, OSA 1. 2009-2013, Sub-Director Board of the Taiwan Photonics Society (TPS in Taiwan).
2008	<ol style="list-style-type: none"> 4. 2002~2013, IEEE Membership Council Committee

	3.	2008~2013, IEEE MTT Society Ballot Member
	2.	2008-2010, Chair of IEEE Photonics Taipei Chapter
	1.	2006-2008, Vice Chair of IEEE LEOS Taipei Chapter
2007	2.	2006-2008, Vice Chair of the SPIE Taiwan Chapter.
	1.	2006-2008, Vice Chair of IEEE LEOS Taipei Chapter
2006	5.	2006-2008, Vice Chair of the SPIE Taiwan Chapter.
	4.	2006-2008, Vice Chair of IEEE LEOS Taipei Chapter
	3.	2004-2006, Executive Secretary of IEEE LEOS Taipei Chapter
	2.	2004-2006, Secretary of SPIE Taiwan Chapter.
	1.	2004-2006, Executive Secretary of the SPIE, Taiwan Chapter.
2005	4.	2004-2006, Executive Secretary of IEEE LEOS Taipei Chapter
	3.	2004-2006, Secretary of SPIE Taiwan Chapter.
	2.	2004-2006, Executive Secretary of the SPIE, Taiwan Chapter.
	1.	2003-2005, Awards Committee of SPIE.
2004	4.	2004-2006, Executive Secretary of IEEE LEOS Taipei Chapter
	3.	2004-2006, Secretary of SPIE Taiwan Chapter.
	2.	2004-2006, Executive Secretary of the SPIE, Taiwan Chapter.
	1.	2003-2005, Awards Committee of SPIE.
2003	1.	2003-2005, Awards Committee of SPIE.