



Curriculum Vitae

Chen-Bin (Robin) Huang, Associate Professor

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Education

2004-2008	Ph.D.	School of Electrical and Computer Engineering Purdue University, West Lafayette, IN, USA (Adviser: Prof. Andrew M. Weiner amw@ecn.purdue.edu)
1997-1999	M.S.	Institute of Electro-Optical Engineering National Chiao Tung University, Taiwan
1993-1997	B.S.	Department of Electrical Engineering National Tsing Hua University, Taiwan

Employment

2012.08-present	Associate Professor	Institute of Photonics Technologies and Department of Electrical Engineering
2008.08-2012.07	Assistant Professor	National Tsing Hua University, Taiwan
2008.04-2008.07	Postdoctoral MTS	Bell Laboratories, Alcatel-Lucent, Murray Hill, NJ, USA
1999.10-2003.10	Research Engineer	Opto-Electronics & Systems Laboratories (OES), Industrial Technology Research Institute (ITRI), Taiwan

Award and Honor

- Visiting Scholar, Department of Physics, University of Bayreuth, Germany, Summer, 2014
- Teaching Excellence Award, College of Electrical Engineering and Computer Science, National Tsing Hua University, 2014
- Junior Faculty Research Award, National Tsing Hua University, 2012
- Junior Faculty Research Award, College of Electrical Engineering and Computer Science, National Tsing Hua University, 2012
- Visiting Researcher, Physics Institute, University of Würzburg, Germany, Summer, 2011
- Finalist, IEEE/LEOS Best Student Paper Award, 2007
- Student Travel Grant, IEEE Lasers & Electro-Optics Society, 2007
- Andrews and Mary I. Williams Fellowship, Purdue University, 2004.01-2005.12
- Visiting Scientist, Materials Research Center, Northwestern University, Summer, 2002
- Personal Distinguished Research Achievement Award, ITRI, 2002
- Personal Research Achievement Award, OES, ITRI, 2002
- Master's Thesis of the Year, Optical Engineering Society of Republic of China, 1999

Professional Activity

- Editorial Board, Dataset Papers in Science, 2012~present
- TPC, Networks and Communications, IEEE TENCON 2012
- Committee, International Symposium on Physics and Applications of Laser Dynamics 2012, 2014
- Committee, Ultrafast Optics and Electronics, IEEE Photonics Society Annual Meeting, 2009



- Regular reviewer for Optics Letters, Optics Express, Journal of Selected Topics in Quantum Electronics, IEEE Photonics Journal, IEEE Photonics Technology Letters, Journal of Lightwave Technology, IEEE Transactions on Microwave Theory and Techniques, Optics Communications, Applied Optics, and Advances in Optical Technologies
- Regular Reviewer, National Science Council, Taiwan
- Referee, Student Thesis Award, Optical Engineering Society of Republic of China, 2013
- Reviewer for Hsinchu Science-Based Industrial Park in Taiwan
- Member, IEEE and IEEE Photonics Society since 1999
- Member, Optical Society of America since 2008
- Member, APS since 2013

**List of Publications****Book Chapters**

1. "Photonic THz and millimeter-wave sources," C.-L. Pan and C.-B. Huang, a chapter in *Photonic Science and Technologies for THz and Millimeter Waves*, C.-L. Pan and J.-W. Shi, eds. (Wiley, in press).
2. "Spectral line-by-line shaping," A. M. Weiner, C.-B. Huang, Z. Jiang, D. E. Leaird, and J. Caraquiten, a chapter in *Advances in Information Optics and Photonics*, A. Friberg and R. Dändliker, eds. (SPIE Press, 2008), pp. 359-380.

Research Book Contribution

1. "Spectral line-by-line pulse shaping of a mode-locked laser and phase modulated CW laser," Z. Jiang, C.-B. Huang, D. E. Leaird, and A. M. Weiner, in *Ultrafast Phenomena XV* P. Corkum, D. Jones, R. J. Dwayne Miller, and A. M. Weiner, eds. (Berlin:Springer, 2007), pp. 124-126.

Journal Publications (*: corresponding authors; in reverse chronological order)

41. W.-T. Chao, C.-C. Chen, J.-L. Peng, S.-D. Yang, and C.-B. Huang*, "Nonlinear optical pulse propagation in a dispersion-increasing fiber for large-scale laser spectral compression," (preparing, 2014).
40. C.-L. Tsai, H.-W. Chen, L.-F. Yang, M.-H. Lin, C.-B. Huang, and S.-D. Yang*, "Erbium fiber oscillator with an intracavity pulse shaper for high-energy low-pedestal wavelength-tunable femtosecond pulse generation," *J. Lightwave Technol.* (appealing).
39. J.-M. Wun, H.-Y. Liu, C.-H. Lai, Y.-S. Chen, S.-D. Yang, C.-B. Huang*, C.-L. Pan, J. E. Bowers, and J.-W. Shi*, "Photonic high-power 160 GHz signal generation by using ultra-fast photodiode and a high-repetition-rate femtosecond optical pulse train generator," *IEEE J. Sel. Topics Quantum Electron.* (submitted, 2014).
38. W.-H. Dai, C.-B. Huang, and J.-S. Huang*, "Mode conversion in high-definition plasmonic optical nanocircuits," *Nano Lett.* (under revision, 2014).
37. C.-C. Chen, C.-B. Huang, and S.-D. Yang*, "Self-referenced frequency comb measurement by using a polarization line-by-line pulse shaper," *Opt. Lett.* **39**(7), 1901-1904 (2014).
36. W.-T. Chao, Y.-Y. Lin, J.-L. Peng, and C.-B. Huang*, "Adiabatic pulse propagation in a dispersion-increasing fiber for spectral compression exceeding the fiber dispersion ratio limitation," *Opt. Lett.* **39**(4), 853-856 (2014).
35. W.-Y. Tsai, J.-S. Huang, and C.-B. Huang*, "Selective trapping or rotation of isotropic dielectric micro-particles by optical near field in a plasmonic Archimedes spiral," *Nano Lett.* **14**(2), 547-552 (2014).
34. P. Geisler, G. Razinskas, E. Krauss, X.-F. Wu, C. Rewitz, P. Tuchscherer, S. Goetz, C.-B. Huang, T. Brixner*, and B. Hecht*, "Multimode plasmon excitation and *in situ* analysis in top-down fabricated nanocircuits," *Phys. Rev. Lett.* **111**(18), 183901 (2013).
33. C.-C. Chen, Y.-S. Chen, C.-B. Huang, M.-C. Chen, and S.-D. Yang*, "Non-iterative data inversion of phase retrieval by omega oscillating filtering for optical arbitrary waveform measurement," *Opt. Lett.* **38**(12), 2011-2013 (2013).
32. C.-D. Ku, W.-L. Huang, J.-S. Huang, and C.-B. Huang*, "Deterministic synthesis of optical vortices in a tailored plasmonic Archimedes spiral," *IEEE Photon. J.* **5**(3), 4800409 (2013).
31. C.-C. Chen, I.-C. Hsieh, S.-D. Yang, and C.-B. Huang*, "Polarization line-by-line pulse shaping for the implementation of vectorial temporal Talbot effect," *Opt. Express* **20**(24), 27062-27070 (2012).
30. C.-W. Chow*, L.-G. Yang, C.-H. Yeh, C.-B. Huang, J.-W. Shi, and C.-L. Pan, "10 Gb/s optical carrier distributed network with W-band (0.1THz) short-reach wireless communication system," *Opt. Comm.* **285**(21-22), 4307-4311 (2012).
29. Y.-T. Hung, C.-B. Huang, and J.-S. Huang*, "Plasmonic mode converter for controlling optical impedance and nanoscale light-matter interaction," *Opt. Express* **20**(18), 20342-20355 (2012). (Selected by *Virtual Journal for Biomedical Optics*, **7**(10), 2012.)
28. J.-W. Lin, C.-L. Lu, H.-P. Chuang, F.-M. Kuo, J.-W. Shi, C.-B. Huang, and C.-L. Pan*, "Photonic generation and detection of W-band chirped millimeter-wave pulses for radar,"



IEEE Photon. Technol. Lett. **24**(16), 1437-1439 (2012).

27. J.-W. Shi*, J.-W. Lin, C.-B. Huang, F.-M. Kuo, N.-W. Chen, C.-L. Pan, and J. E. Bowers, "Photonic generation of few-cycle millimeter-wave pulse using a waveguide-based photonic-transmitter-mixer," *IEEE Photon. J.* **4**(4), 1071-1079 (2012).

===== Prior to promotion to Associate Professor =====

26. J.-W. Shi*, F.-M. Kuo, N.-W. Chen, S.-Y. Set, C.-B. Huang, and J. E. Bowers, "Photonic generation and wireless transmission of linearly/nonlinearly continuously tunable chirped millimeter-wave waveforms with high time-bandwidth product at W-band," *IEEE Photon. J.* **4**(1), 215-223 (2012).
25. N.-K. Chen*, F.-Z. Liu, H.-P. Chuang, Y. Lai, S.-D. Yang, J.-W. Lin, S.-K. Liaw, Y.-C. Chang, C.-B. Huang, and S. Chi, "Highly efficient femtosecond pulse stretching by tailoring cavity dispersion in erbium fiber lasers with an intracavity short-pass edge filter," *Opt. Express* **19**(17), 15879-15884 (2011).
24. H.-P. Chuang and C.-B. Huang*, "Wavelength-tunable spectral compression in a dispersion-increasing fiber," *Opt. Lett.* **36**(15), 2848-2850 (2011).
23. C.-S. Hsu, H.-C. Chiang, H.-P. Chuang, C.-B. Huang, and S.-D. Yang*, "Forty-photon-per-pulse spectral phase retrieval by shaper-assisted modified interferometric field autocorrelation," *Opt. Lett.* **36**(14), 2611-2613 (2011).
22. J.-W. Lin, H.-P. Chuang, F.-M. Kuo, C.-H. Lin, T.-A. Liu, J.-W. Shi, C.-B. Huang, and C.-L. Pan*, "Enhanced performance of narrow-band millimeter-wave generation using shaped-pulse-excited photonic transmitters," *IEEE Photon. Technol. Lett.* **23**(13), 902-904 (2011).
21. P.-N. Li, H.-H. Tsao, J.-S. Huang, and C.-B. Huang*, "Subwavelength localization of near fields in coupled metallic spheres for single-emitter polarization analysis," *Opt. Lett.* **36**(12), 2339-2341 (2011).
20. J.-W. Shi, C.-B. Huang, and C.-L. Pan*, "Millimeter-wave photonic wireless links for very-high data rate communication," *[Invited Review], NPG Asia Materials* **3**(2), 41-48 (2011).
19. F.-M. Kuo, C.-B. Huang, J.-W. Shi*, N.-W. Chen, H.-P. Chuang, J. E. Bowers, and C.-L. Pan, "Remotely up-converted 20 Gbit/s error-free wireless on-off-keying data transmission at W-band using an ultra-wideband photonic transmitter-mixer," *IEEE Photon. J.* **3**(2), 209-219 (2011).
18. H.-P. Chuang and C.-B. Huang*, "Generation and delivery of 1-ps optical pulses with ultrahigh-rates over 25 km single mode fiber by a spectral line-by-line pulse shaper," *Opt. Express* **18**(23), 24003-24011 (2010).
17. F.-M. Kuo, J.-W. Shi, H.-C. Chiang, H.-P. Chuang, H.-K. Chiou, C.-L. Pan, N.-W. Chen, H.-J. Tsai, and C.-B. Huang*, "Spectral power enhancement in a 100-GHz photonic millimeter-wave generator enabled by spectral line-by-line pulse shaping," *IEEE Photon. J.* **2**(5), 719-727 (2010).
16. C.-B. Huang* and A. M. Weiner, "Analysis of time-multiplexed optical line-by-line pulse shaping: application for radio-frequency and microwave photonics," *Opt. Express* **18**(9), 9366-9377 (2010).
15. F. Ferdous*, D. E. Leaird, C.-B. Huang, and A. M. Weiner, "Dual comb cross-correlation technique for optical arbitrary waveform characterization," *Opt. Lett.* **34**(24), 3875-3877 (2009).
14. C.-B. Huang*, D. E. Leaird, and A. M. Weiner, "Synthesis of millimeter-wave power spectra using time-multiplexed optical pulse shaping," *IEEE Photon. Technol. Lett.* **21**(18), 1287-1289 (2009).
13. C.-B. Huang*, Z. Jiang, D. E. Leaird, and A. M. Weiner, "Quantitative study of optical frequency to intensity noise conversion in line-by-line pulse shaping," *IEEE J. Quantum Electron.* **45**(6), 661-673 (2009).

===== Prior to joining IPT/NTHU =====

12. S.-D. Yang*, C.-S. Hsu, S.-L. Lin, H. Miao, C.-B. Huang, and A. M. Weiner, "Direct spectral phase retrieval of ultrashort pulses by double modified one-dimensional autocorrelation traces," *Opt. Express* **16**(25), 20617-20625 (2008).
11. C.-B. Huang*, Z. Jiang, D. E. Leaird, J. Caraquitena, and A. M. Weiner, "Spectral line-by-line



- shaping for optical and microwave arbitrary waveform generations,” **[Invited Review]**, *Laser & Photon. Rev.* **2**(4), 227-248 (2008).
10. V. R. Supradeepa*, C.-B. Huang, D. E. Leaird, and A. M. Weiner, “Femtosecond pulse shaping in two dimensions: towards higher complexity optical waveforms,” *Opt. Express* **16**(16), 11878-11887 (2008).
 9. C.-B. Huang*, S.-G. Park, D. E. Leaird, and A. M. Weiner, “Nonlinearly broadened phase-modulated continuous-wave laser frequency combs characterized using DPSK decoding,” *Opt. Express* **16**(4), 2520-2527 (2008).
 8. Z. Jiang*, D. E. Leaird, C.-B. Huang, H. Miao, M. Kourogi, K. Imai, and A. M. Weiner, “Spectral line-by-line pulse shaping on an optical frequency comb generator,” *IEEE J. Quantum Electron.* **43**(12), 1163-1174 (2007).
 7. C.-B. Huang*, D. E. Leaird, and A. M. Weiner, “Time-multiplexed photonically enabled radio-frequency arbitrary waveform generation with 100 ps transitions,” *Opt. Lett.* **32**(22), 3242-3244 (2007). (Selected by *Virtual Journal of Ultrafast Science*, **7**(1), 2008.)
 6. Z. Jiang, C.-B. Huang, D. E. Leaird, and A. M. Weiner*, “Spectral line-by-line pulse shaping for optical arbitrary pulse train generation,” *J. Opt. Soc. Am. B* **24**(9), 2124-2128 (2007).
 5. Z. Jiang[§], C.-B. Huang[§], D. E. Leaird, and A. M. Weiner*, “Optical arbitrary waveform processing of more than 100 spectral comb lines,” *Nature Photonics* **1**(8), 463-467 (2007). (§ These authors contributed equally to this work.)
 4. C.-B. Huang*, Z. Jiang, D. E. Leaird, and A. M. Weiner, “The impact of optical comb stability on waveforms generated via spectral line-by-line pulse shaping,” *Opt. Express* **14**(26), 13164-13176 (2006).
 3. C.-B. Huang*, Z. Jiang, D. E. Leaird, and A. M. Weiner, “High-rate femtosecond pulse generation via line-by-line processing of a phase-modulated CW laser frequency comb,” *Electron. Lett.* **42**(9), 1114-1115 (2006).
 2. G. Wang*, G. Spalding, R. Huang, L. Luan and J. B. Ketterson, “Numerical analysis of waveguide-enhanced optical bistability,” *Opt. Quantum Electron.* **35**(15), 1357-1366 (2003).
 1. C.-B. Huang and Y. Lai*, “Loss-less pulse intensity repetition-rate multiplication using optical all-pass filtering,” *IEEE Photon. Technol. Lett.* **12**(2), 167-169 (2000).

International Conference Papers (presenter italicized; reverse chronological order)

78. C.-D. Ku, *C.-F. Chen*, and C.-B. Huang, “Generation of surface plasmon vortex under linearly polarized optical excitation in a gold metasurface,” *Frontiers in Optics/Laser Science*, Tucson, AZ, USA, 2014. (preparing)
77. W.-Y. Tsai, *J.-S. Huang*, and C.-B. Huang, “Plasmonic Archimedes spiral for selective optical trapping and rotation of optically isotropic particles,” *NFO-13*, Salt Lake City, UT, 2014. (submitted)
76. W.-H. Dai, C.-B. Huang, and *J.-S. Huang*, “Mode conversion in a high-definition plasmonic optical nanocircuit,” *NFO-13*, Salt Lake City, UT, USA. (submitted)
75. W.-Y. Tsai, *J.-S. Huang*, and C.-B. Huang, “Plasmonic Archimedes spiral for selective optical trapping and rotation of optically isotropic particles,” *Optical Trapping & Optical Micromanipulation Conference XI*, San Diego, CA, 2014.
74. W.-T. Chao, C.-C. Chen, J.-L. Peng, S.-D. Yang, and C.-B. Huang, “Waveform-dependent laser spectral compression through pulse propagation in a dispersion-increasing fiber,” *Conference on Lasers and Electro-Optics*, San Jose, CA, USA, 2014.
73. C.-D. Ku and C.-B. Huang, “Experimental observation of surface plasmon vortices with arbitrarily synthesized intensity patterns,” *Conference on Lasers and Electro-Optics*, San Jose, CA, USA, 2014.
72. C.-H. Lin, B.-S. Wu, and C.-B. Huang, “Anomalous light bending with high efficiency by plasmonic phase-discontinuous air-slit array,” *Conference on Lasers and Electro-Optics*, San Jose, CA, USA, 2014.
71. *C.-C. Chen*, C.-B. Huang, and S.-D. Yang, “Self-referenced frequency comb measurement by a polarization line-by-line pulse shaper,” *Conference on Lasers and Electro-Optics*, San Jose, CA, USA, 2014.
70. J.-M. Wun, C.-H. Lai, Y.-S. Chen, H.-Y. Liu, C.-B. Huang, C.-L. Pan, and *J.-W. Shi*, “Strong enhancement in saturation power of sub-THz photodiode by using photonic millimeter-wave



- femtosecond pulse generator,” Optical Fiber Communications Conference, San Francisco, CA, USA, 2014.
69. C.-B. Huang, W.-Y. Tsai, and J.-S. Huang, “Selectable trapping or rotation of micro-particles using a plasmonic Archimedes spiral,” APS March Meeting, Denver, CO, USA, 2014.
68. Y.-J. Tsou, C.-H. Lu, C.-B. Huang, S.-D. Yang, and A. H. Kung, “Instantaneous frequency determination by resolved spectral phase from frequency-resolved optical gating,” Optics and Photonics Taiwan, International Conference, Chungli, Taiwan, 2013.
67. C.-C. Chen, H.-W. Chen, P.-Y. Wu, C.-B. Huang, and S.-D. Yang, “Self-referenced femtosecond pulse measurement by a polarization pulse shaper,” Optics and Photonics Taiwan, International Conference, Chungli, Taiwan, 2013.
66. H.-W. Sun, P.-Y. Huang, C.-C. Chen, W.-T. Chao, M.-C. Chen, S.-D. Yang, and C.-B. Huang, “Generation of half-cycle linearly polarized electric field transient,” Optics and Photonics Taiwan, International Conference, Chungli, Taiwan, 2013.
65. W.-T. Chao, J.-L. Peng, and C.-B. Huang, “Adiabatic soliton propagation for large-scale spectral compression,” Optics and Photonics Taiwan, International Conference, Chungli, Taiwan, 2013.
64. W.-H. Dai, J.-S. Huang, and C.-B. Huang, “Mode conversion in a plasmonic two-wire transmission line,” Optics and Photonics Taiwan, International Conference, Chungli, Taiwan, 2013.
63. C.-D. Ku and C.-B. Huang, “Experimental observation of deterministically synthesized surface plasmon vortices,” Optics and Photonics Taiwan, International Conference, Chungli, Taiwan, 2013.
62. C.-H. Lin and C.-B. Huang, “Anomalous light bending using plasmonic phase discontinuous air slit array,” Optics and Photonics Taiwan, International Conference, Chungli, Taiwan, 2013.
61. W.-Y. Tsai and C.-B. Huang, “Selective trapping/rotating of micro-particles in a plasmonic Archimedes spiral,” Optics and Photonics Taiwan, International Conference, Chungli, Taiwan, 2013.
60. C.-C. Chen, H.-W. Chen, C.-B. Huang, and S.-D. Yang, “Polarization shaper-assisted dual-quadrature spectral shearing interferometry,” IEEE Photonics Conference, Bellevue, WA, 2013.
59. W.-T. Chao, H.-W. Chen, H.-P. Chuang, S.-D. Yang, and C.-B. Huang, “Spectral compression of an all-normal dispersion fiber laser,” IEEE Photonics Conference, Bellevue, WA, 2013.
58. W.-T. Chao, H.-W. Chen, H.-P. Chuang, Y.-Y. Lin, S.-D. Yang, and C.-B. Huang, “Large-scale spectral compression using a dispersion-increasing fiber,” The 3rd Russian-Taiwan School Seminar on Nonlinear Optics and Photonics, Vladimir, Russia, 2013.
57. C.-C. Chen, C.-Y. Hsieh, S.-D. Yang, and C.-B. Huang, “Synthesis of arbitrarily polarized optical waveforms using vectorial temporal Talbot effect,” Conference on Lasers and Electro-Optics, CTu3J.3, San Jose, CA, USA, 2013.
56. C.-C. Chen, Y.-S. Chen, C.-B. Huang, and S.-D. Yang, “Non-iterative data inversion of phase retrieved by omega oscillating filtering,” Conference on Lasers and Electro-Optics, CW1H.1, San Jose, CA, USA, 2013.
55. C.-H. Lu, L.-F. Yang, M. Zhi, A. V. Sokolov, S.-D. Yang, C.-B. Huang, and A. H. Kung, “Raman-assisted continuum generation in CVD single-crystal diamond,” Optics and Photonics Taiwan, International Conference, Taipei, Taiwan, 2012.
54. C.-C. Chen, C.-B. Huang, and S.-D. Yang, “Polarization shaper-assisted SPIDER,” Optics and Photonics Taiwan, International Conference, Taipei, Taiwan, 2012.
53. J.-W. Lin, C.-L. Lu, J.-W. Shi, C.-B. Huang and C.-L. Pan, “Frequency switchable coherent narrow-band millimeter-wave radiation using an optical pulse shaper and a photonic transmitter,” Optics and Photonics Taiwan, International Conference, Taipei, Taiwan, 2012.
52. W.-T. Chao, H.-W. Chen, H.-P. Chuang, S.-D. Yang, and C.-B. Huang, “Spectral compression of an all-normal dispersion fiber laser,” International Symposium on Physics and Applications of Laser Dynamics, Tainan, Taiwan, 2012.

Prior to promotion to Associate Professor

51. H.-P. Chuang and C.-B. Huang, “Large-scale laser spectral compression using a true dispersion-increasing fiber,” Conference on Lasers and Electro-Optics, JTh2A.13, San Jose, CA, USA, 2012.



50. W.-L. Huang, C.-D. Ku, and C.-B. Huang, "Shaping the surface plasmon vortex in an Archimedes spiral through geometrical design," Conference on Lasers and Electro-Optics, JTh2A.88, San Jose, CA, USA, 2012.
49. C.-C. Chen, I.-C. Hsieh, S.-D. Yang, and C.-B. Huang, "Polarization spectral line-by-line pulse shaping," Conference on Lasers and Electro-Optics, CW3D.2, San Jose, CA, USA, 2012.
48. C.-W. Chow, C. Yeh, C.-B. Huang, J.-W. Shi, and C. Pan, "Optical carrier distributed network with 0.1 THz short-reach wireless communication system," Optical Fiber Communications Conference, OTu2H.2, Los Angeles, CA, USA, 2012.
47. C.-B. Huang, "Optical arbitrary waveform generations for microwave/millimeter-wave photonics," **[Keynote address]**, Workshop on Advances in Photonics and Optical Materials, Chennai, India, 2012.
46. C.-L. Pan, C. W. Chow, C. H. Yeh, C.-B. Huang, and J.-W. Shi, "Recent advances in millimeter-wave photonic wireless links for very high data rate communication," **[Invited]**, Asia Communications and Photonics Conference, 8307-47, Shanghai, China, 2011.
45. P.-N. Li, Y.-T. Hung, H.-H. Tsao, J.-S. Huang, and C.-B. Huang, "Plasmonic nanodiscs designed for near-field polarization analysis," International Photonics Conference Taiwan, C-Th-III-4, Tainan, Taiwan, 2011.
44. J.-W. Lin, J.-W. Shi, C.-B. Huang, and C.-L. Pan, "Simulation study on chirped millimeter-wave generation based on frequency-to-time mapping," International Photonics Conference Taiwan, Tainan, Taiwan, 2011.
43. P.-N. Li, W.-L. Huang, H.-H. Tsao, and C.-B. Huang, "Plasmonic structures for implementing nanoscopic polarization sensitive devices," The 4th Cross-Strait Workshop on Optical Microstructure and Laser Technologies, Yanzhou, China, 2011.
42. W.-L. Huang and C.-B. Huang, "Shaping the optical near-field vortex distribution in a plasmonic spiral," IEEE Photonics Conference, MX 3, Arlington, VA, 2011.
41. P.-N. Li, H.-H. Tsao, and C.-B. Huang, "A plasmonic nanocluster designed for near-field polarization analysis," IEEE Photonics Conference, MX 4, Arlington, VA, 2011.
40. H.-P. Chuang and C.-B. Huang, "Adiabatic soliton spectral compression in a dispersion-increasing fiber," IEEE Photonics Conference, WU 4, Arlington, VA, 2011.
39. F.-Z. Liu, N.-K. Chen, H.-P. Chuang, J.-W. Lin, Y. Lai, S.-K. Liaw, Y.-C. Chang, S.-D. Yang, C.-B. Huang, S. Chi, and C. Lin, "Pulsewidth-stretchable femtosecond erbium fiber lasers using an intracavity short-pass edge filter," Conference on Lasers and Electro-Optics Pacific Rim, 126.00, Sydney, Australia, 2011.
38. W.-L. Huang, H.-H. Tsao, and C.-B. Huang, "Generation of rational optical vortices in a plasmonic spiral," Conference on Lasers and Electro-Optics Europe, EJ.P.7, Munich, Germany, 2011.
37. P.-N. Li, H.-H. Tsao, and C.-B. Huang, "Multiple selective excitations of localized surface plasmons in coupled gold nano-spheres," Conference on Lasers and Electro-Optics, JTuI57, Baltimore, MD, USA, 2011.
36. H.-P. Chuang and C.-B. Huang, "Generation and delivery of 496-GHz optical pulse train over 25-km single-mode fiber using a line-by-line optical pulse shaper," Conference on Lasers and Electro-Optics, CFG5, Baltimore, MD, USA, 2011.
35. J.-W. Lin, H.-P. Chuang, F.-M. Kuo, C.-H. Lin, T.-A. Liu, J.-W. Shi, C.-B. Huang, and C.-L. Pan, "Power-enhanced narrow-band sub-THz generation by use of a photonic transmitter and shaped optical pulses," Conference on Lasers and Electro-Optics, CMW6, Baltimore, MD, USA, 2011.
34. C.-S. Hsu, H.-C. Chiang, H.-P. Chuang, C.-B. Huang, and S.-D. Yang, "40-photon-per-pulse spectral phase retrieval by shaper-assisted modified interferometric field autocorrelation," Conference on Lasers and Electro-Optics, CTuO5, Baltimore, MD, USA, 2011.
33. C.-B. Huang, "Applications of optical pulse shaping in the millimeter-wave and sub-THz regimes," **[Invited]**, The 2nd NSC-RFBR Symposium on Nonlinear Optics and Photonics, Hsinchu, Taiwan, 2011.
32. F.-M. Kuo, J.-W. Shi, N.-W. Chen, C.-B. Huang, H.-P. Chuang, H.-J. Tsai, and C.-L. Pan, "20-Gb/s error-free wireless transmission using ultra-wideband photonic transmitter-mixer excited with remote distributed optical pulse train," Optical Fiber Communications



- Conference, OWT5, Los Angeles, CA, USA, 2011.
31. C.-B. Huang, J.-W. Shi, F.-M. Kuo, H.-P. Chuang, and C.-L. Pan, "Green and high-power photonic-assisted remote millimeter-wave generation at 124-GHz," Optical Fiber Communications Conference, OThG6, Los Angeles, CA, USA, 2011.
 30. P.-N. Li, H.-H. Tsao, and C.-B. Huang, "Multiple selective excitations of localized surface plasmons in coupled gold nano-spheres," International Conference on Optics and Photonics in Taiwan, OPT1-O-010, Tainan, Taiwan, 2010.
 29. H.-H. Tsao, and C.-B. Huang, "Spatio-temporal control of surface plasmons in coupled gold-cylinders by shaped optical waveforms," International Conference on Optics and Photonics in Taiwan, OPT1-P-086, Tainan, Taiwan, 2010.
 28. H.-P. Chuang and C.-B. Huang, "Generation and delivery of ultrahigh-rate, 1-ps optical pulses over 25-km single-mode fiber using a spectral line-by-line pulse shaper," International Conference on Optics and Photonics in Taiwan, OPT3-O-007, Tainan, Taiwan, 2010.
 27. C.-L. Pan, J.-W. Shi, C.-B. Huang, and C.-W. Chow, "Recent advances in photonic impulse-radio wireless communication links at 100 GHz," **[Invited]**, International Photonics and Optoelectronics Meeting, Wuhan, China, 2010.
 26. H.-P. Chuang, H.-C. Chiang, and C.-B. Huang, "Generation and delivery of 1-ps optical pulses over 20 km single-mode fiber using a spectral line-by-line pulse shaper," The 23rd Annual Meeting of IEEE Photonics Society, ThO3, Denver, CO, USA, 2010.
 25. C.-S. Hsu, H.-C. Chiang, H.-P. Chuang, C.-B. Huang, and S.-D. Yang, "Ultrasensitive femtosecond pulse measurement by shaper-assisted modified interferometric field autocorrelation," The 23rd Annual Meeting of IEEE Photonics Society, ThG4, Denver, CO, USA, 2010.
 24. J.-W. Shi, F.-M. Kuo, H.-J. Tsai, Y.-M. Hsin, N.-W. Chen, H.-C. Chiang, H.-P. Chuang, C.-B. Huang, and C.-L. Pan, "20-Gb/s On-off-keying wireless data transmission by using bias modulation of NBUTC-PD based W-band photonic transmitter-mixer," IEEE International Topical Meeting on Microwave Photonics, WE3-3, Montreal, Quebec, Canada, 2010.
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