

賴暎杰

著作目錄

期刊論文

1. S.-M. Wang, Y. Lai (2016, Dec). Up to 400 GHz burst-mode pulse generation from a hybrid harmonic mode-locked Er-doped fibre laser. *Laser Physics Letters*. (Accepted).
2. C.-J. Luo, S.-M. Wang, Y. Lai (2016, Apr). Bound soliton fiber laser mode-locking without saturable absorption effect. *IEEE Photonics Journal*, 8(4), 1502609.
3. Y. Liu, Y. Hsu, C.-W. Chow, L.-G. Yang, C.-H. Yeh, Y. Lai, H.-K. Tsang (2016, Jan). 110 GHz hybrid mode-locked fiber laser with enhanced extinction ratio based on nonlinear silicon-on-insulator micro-ring-resonator (SOI MRR). *Laser Physics Letters*, 13(3), 035101.
4. S. -Y. Wu, W. -W. Hsiang, Y. Lai (2015, Jul). Synchronous-asynchronous laser mode-locking transition. *Physical Review A*, 92(1), 013848.
5. Y. -J. Hsu, B. -H. Cheng, Y. -C. Lai, D. -P. Tsai (2015, Jul). Classical analog of electromagnetically induced transparency in the visible range with ultra-compact plasmonic micro-ring resonators. *IEEE Journal of Selected Topics in Quantum Electronics*, 21(4), 4600506.
6. B. -J. Fong, W. -T. Lin, S. -Y. Wu, J. -L. Peng, W. -W. Hsiang, Y. Lai (2015, Mar). Relative carrier-envelope phase stabilization of hybridly synchronized ultrafast Yb and Er fiber-laser systems with the feed-forward scheme. *Optics Letters*, 40(6), 966-969.
7. Y. -J. Hsu, Y. Lai (2015, Jan). Vertical plasmonic resonance coupler. *Optics Express*, 23(1), 292-300.
8. S.-Y. Wu, W.-W. Hsiang, Y. Lai (2014, Jul). Laser dynamics and relative timing jitter analysis of passively synchronized Er- and Yb-doped mode-locked fiber lasers. *Journal of the Optical Society of America B-Optical Physics*, 31 (7), 1508-1515.
9. L.-G. Yang, S.-S. Jyu, C.-W. Chow, C.-H. Yeh, C.-Y. Wong, H.-K. Tsang, Y. Lai (2014, Jun). A 110 GHz passive mode-locked fiber laser based on a nonlinear silicon-micro-ring-resonator. *Laser Physics Letters*, 11(6), 065101.
10. M. Chen, C.-H. Chen, Y. Lai, Y.-Q. Lu, Y.-H. Lin (2014, Mar). An electrically tunable polarizer for a fiber system based on a polarization-dependent beam size

- derived from a liquid crystal lens. *IEEE Photonics Journal*, 6 (3), 7100408.
11. M. Chen, C.-H. Chen, Y. Lai, and Y.-H. Lin (2014, Feb). An electrically tunable liquid crystal lens for fiber coupling and variable optical attenuation. *Electrical & Electronic System*, 3(2), 1000124.
 12. L.-G. Yang, S.-S. Jyu, C.-W. Chow, C.-H. Yeh, Y. Lai (2014, Jan). S-band pulse generation by polarization additive-pulse mode-locking in an erbium-doped all-fiber ring laser. *Laser Physics Letters*, 11(1), 015105.
 13. Y. Liu, Y. Lai, and K. Chang (2013, Nov). Plasmonic coupler for silicon-based micro-slabs to plasmonic nano-gap waveguide mode conversion enhancement. *Journal of Lightwave Technology*, 31 (11), 1708-1712.
 14. S.-S. Jyu, L.-G. Yang, C.-Y. Wong, C.-H. Yeh, C.-W. Chow, H.-K. Tsang, Y. Lai (2013, Oct). 250-GHz passive harmonic mode-locked Er-doped fiber laser by dissipative four-wave mixing with silicon-based micro-ring. *IEEE Photonics Journal*, 5(5), 1502107.
 15. B.-W. Tsai, S.-Y. Wu, C. Hu, W.-W. Hsiang, Y. Lai (2013, Sep). Subfemtosecond hybrid synchronization between ultrafast Yb- and Er-fiber laser systems by controlling the relative injection timing. *Optics Letters*, 38(17), 3456–3459.
 16. S.-S. Jyu, G.-H. Jiang, Y. Lai, (2013, Aug). Laser Dynamics of Asynchronous Rational Harmonic Mode-Locked Fiber Soliton Lasers. *Laser Physics*, 23(8), 085106.
 17. J.-H. Lin, J.-L. Jhu, S.-S. Jyu, T.-C. Lin, Y. Lai (2013, Feb). Characteristics of a Low Repetition Rate Passively Mode-Locked Yb-Doped Fiber Laser in an All-Normal Dispersion Cavity. *Laser Physics*, 23(2), 025103 (2013).
 18. S.-M. Wang, S.-S. Jyu, W.-W. Hsiang, Y. Lai (2013, Feb). Asynchronous Harmonic Mode Locking in an All-Normal Dispersion Yb-Doped Fiber Laser. *IEEE Photonics Journal*, 5(1), 1500207.
 19. S.-S. Jyu, Y. Lai (2013, Feb). Repetition frequency pulling effects in asynchronous mode-locking. *Optics Letters*, 38(3), 347-349.
 20. Y. Lai (2012, Dec). Resonance fluorescence spectra near a photonic bandgap. *Ann Phys-Berlin (invited paper)*, 524, A179-A180.
 21. T.-H. Yen, J.-H. Lin, and Y. Lai (2012, Feb). Actively Q-switched mode-locked Yb-doped fiber laser with high mode-locking contrast. *Laser Physics*, 22(2), 441-446.
 22. W.-W. Hsiang, W.-C. Chiao, C.-Y. Wu, and Y. Lai (2011, Nov). Direct observation of two-color pulse dynamics in passively synchronized Er and Yb mode-locked fiber lasers. *Optics Express*, 19(24), 24507–24515.
 23. 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, S. Chi (2011, Aug). Highly efficient femtosecond pulse

stretching by tailoring cavity dispersion in erbium fiber lasers with an intracavity short-pass edge filter . *Optics Express*, 19(17), 15879-15884 .

研討會論文

1. Y.-D. Li, C.-J. Luo, S.-M. Wang, Y. Lai (2016, Dec). 10 GHz polarization maintaining mode-locked Er-doped fiber laser based on a nonlinear fiber loop with in-loop active phase modulation. Optics & Photonics Taiwan, the International Conference (OPTIC), Taipei, Taiwan.
2. Z.-R. Liu, S.-M. Wang, C.-J. Luo, Y. Lai (2016, Dec). Wavelength tunability of a CW Yb-doped fiber laser through cavity loss and pump power modulation. Optics & Photonics Taiwan, the International Conference (OPTIC), Taipei, Taiwan.
3. C.-J. Luo, Y. Lai, (2016, Oct). RIN noise reduction effect of a 10 GHz hybrid bound soliton mode-locked fiber laser. IEEE Photonics Conference (IPC), Hawaii, USA.
4. S.-M. Wang, Y. Lai (2016, Jul). Generation of 100 GHz pulse train from a phase modulated hybrid mode-locked Er-fiber laser with an intra-cavity etalon. OptoElectronics and Communications Conference (OECC), Japan.
5. D.-H. Yeh, Y.-H. Su, Y. Lai (2016, Jun). Synchronous-asynchronous laser mode-locking transition: experimental results. Conference on Lasers and Electro-Optics (CLEO), San Jose, CA, USA.
6. D.-H. Yeh, Y. Lai (2015, Dec). Optical Frequency Variation Control of a 10GHz Asynchronous Harmonic Mode-Locked Fiber Soliton Laser with CW Laser Injection. OPTIC 2015, Hsinchu, Taiwan.
7. S.-C. Lin, S.-M. Wang, C.-J. Luo, Y. Lai (2015, Dec). Polarization Maintaining Passive Mode-Locked Er-Fiber Laser Based on Nonlinear Amplifying Loop. OPTIC 2015, Hsinchu, Taiwan.
8. Y. Lai, W.-W. Hsiang, S.-Y. Wu (2015, Jul). Sub-fs hybrid synchronization between mode-locked fiber lasers. CLEO-PR 2015 (invited talk), Busan, Korea.
9. D.-H. Yeh, S.-M. Wang, C.-J. Luo, Y. Lai (2015, Jun). Optical Frequency Characteristics of a 10GHz Asynchronous Harmonic Mode-Locked Fiber Soliton Laser. CLEO-Europe 2015, Munich, Germany..
10. W.-W. Hsiang, B.-J. Fong, W.-T. Lin, S.-Y. Wu, J.-L. Peng, Y. Lai (2015, May). Stabilizing the relative carrier-envelop phase of hybridly synchronized ultrafast Yb and Er fiber laser systems by the feed-forward scheme. CLEO 2015, San Jose, CA, USA.
11. C.-J. Luo, S.-M. Wang, Y. Lai (2014, Dec). An environmentally stable FM mode-

- locked Er-doped fiber soliton laser with a sigma-type cavity. OPTIC 2014, Taichung, Taiwan.
12. K.-T. Yen, C.-J. Luo, Y. Lai (2014, Dec). Dual wavelength lasing of a 10 GHz active mode-locked semiconductor optical amplifier fiber laser by EO phase modulation. OPTIC 2014, Taichung, Taiwan.
 13. Y.-H. Chou, S.-Y. Wu, Y. Lai (2014, Dec). Sub-ps all-fiber all-normal-dispersion P-APM mode-locked Yb-doped fiber laser. OPTIC 2014, Taichung, Taiwan.
 14. Y.-H. Chou, S.-Y. Wu, Y. Lai (2014, Sep). All-fiber all-normal- dispersion P-APM mode-locked Yb-doped fiber laser. IS-PALD 2014, Hsinchu, Taiwan.
 15. Y.-P. Wang, Y. Lai (2014, Sep). Wavelength Variation Reduction Characteristics of a Narrow-Linewidth PM Brillouin Fiber Laser. IS-PALD 2014, Hsinchu, Taiwan.
 16. C.-J. Luo, S.-M. Wang, Y. Lai (2014, May). 10 GHz Bound Soliton Mode-locking in an Environmentally Stable FM Mode-locked Er-doped Fiber Soliton Laser. CLEO 2014, San Jose, CA, USA.
 17. S. M. Wang, S. S. Jyu, Y Lai (2014, May). 300 GHz Bound Pulse Generation in a Filter-Assisted Harmonic Mode-Locked Er-doped Fiber Laser with 20 GHz Phase Modulation. CLEO 2014, San Jose, CA, USA.
 18. Y. Lai (2014, Jan). Synchronous and Asynchronous Laser Mode-locking at High Repetition Rates. ACUP 2014 (invited talk), Kobe, Japan.
 19. S.-B. Lin, S.-S. Jyu, S.-Y. Wu, Y. Lai (2013, Dec). Ultra-short noise-like pulse operation state of a passive mode-locked Er-doped fiber laser. OPTIC 2013, Zhongli, Taiwan.
 20. S.-Y. Wu, W.-W. Hsiang, Y. Lai (2013, Oct). Relative timing jitter of passively synchronized Er-doped and Yb-doped mode-locked fiber lasers. IEEE Photonics Conference, Washington, USA.
 21. S.-S. Jyu, Y. Lai (2013, Jul). Determination of Effective Modulation Strength for Asynchronous Rational Harmonic Mode-Locked Fiber Lasers with Variational Method. ICAIT 2013, Hsinchu, Taiwan.
 22. S.-S. Jyu, Y. Lai (2013, Jun). Generation of 100 GHz bound-pulses in an asynchronous mode-locked Er-fiber laser with 10 GHz phase modulation. OECC 2013, Kyoto, Japan.
 23. L. G. Yang, S.-S. Jyu, C. H. Yeh, S. B. Lin, C. W. Chow, Y. Lai (2013, May). Self-starting S-band mode-locked fiber ring laser by polarization additive pulse mode-locking. CLEO 2013, San Jose, CA, USA.
 24. S.-S. Jyu, L.-G. Yang, C Y Wong, C.-H. Yeh C.-W. Chow, H. K. Tsang, Y. Lai (2013, May). Multi-Bound Pulse State in a 250 GHz Mode-Locked Fiber Laser Based on a Silicon Micro-Ring Resonator. CLEO 2013, San Jose, CA, USA.

25. W.-W. Hsiang, B.-W. Tsai, C. Hu, S.-Y. Wu, Y. Lai, (2013, May). Subfemtosecond synchronization between Yb-fiber and Er-fiber lasers by controlling the relative injection timing. CLEO 2013, San Jose, CA, USA.
26. S. -S. Jyu, G. -H. Jiang, C. -H. Chang and Y. Lai (2012, Dec). 33GHz asynchronous rational harmonic mode-locked fiber soliton laser. OPTIC 2012, Taipei, Taiwan..
27. S. -S. Jyu, L. -Y. Yang, J. H. Lin and Y. Lai (2012, Dec). Higher order chirped pulses from mode-locked Er-fiber lasers with elongated anomalous-dispersion fiber cavity. OPTIC 2012, Taipei, Taiwan..
28. S. -S. Jyu, Z. -Y. Ho, and Y. Lai (2012, Dec). Non-interferometric fiber dispersion measurement method with high sensitivity. OPTIC 2012, Taipei, Taiwan..
29. Y. Lai (2012, Nov). New laser dynamics of mode-locked fiber lasers. IS-PALD 2012 (invited talk), Tainan, Taiwan..
30. S. -S. Jyu, Y. Lai (2012, May). Pulse repetition rate control of asynchronous mode-locked fiber lasers without changing the cavity length. CLEO 2012, San Jose, California, USA..
31. L.-H. Kan, S.-S. Jyu, J.-H. Lin, and Y. Lai (2011, Dec). Pulse characteristics of mode-locked Er-doped fiber laser with long-length negative-dispersion fiber cavity. 2011 IPC, Tainan, Taiwan..
32. S.-M. Wang, S.-S. Jyu, and Y. Lai (2011, Dec). Laser dynamics of asynchronous harmonic mode-locked Yb-doped fiber laser . 2011 IPC, Tainan, Taiwan. .
33. S.-M. Wang, S.-S. Jyu, W.-W. Hsiang, Y. Lai (2011, Aug). Demonstration of 10GHz asynchronous mode-locking on a ytterbium-doped fiber laser with normal dispersion. CLEO-PR 2011.
34. L.-H. Kan, S.-S. Jyu, J. H. Lin, and Y. Lai (2011, Jul). Direct generation of 126nJ high-pulse-energy pulse trains from a passive mode-locked erbium-doped fiber laser with 500 kHz pulse repetition rate . OECC 2011.
35. S.-M. Wang, S.-S. Jyu, W.-W. Hsiang, and Y. Lai (2011, Jul). Jitter noises of a 10GHz asynchronous harmonic mode-locked Er-fiber soliton laser. OECC 2011, Kaohsiung, Taiwan.
36. Y. Lai, W.-W. Hsiang, J.-H. Lin, S.-S. Jyu (2011, Jul). New laser dynamics of modelocked fiber lasers. OECC 2011 (invited talk), Kaohsiung, Taiwan.
37. W.-W. Hsiang, W.-C. Chao, C.-Y. Wu, and Y. Lai (2011, May). Different operation states of passive synchronization between a 1.03 μm single-pulse and a 1.56 μm bound-soliton mode-locked fiber lasers. CLEO/Europe 2011, Munich, Germany..