Yi-Hsin Lin

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EDUCATION

07/2002-05/2006	**Ph.D. in Optical Sciences and Engineering**, CREOL: The College of Optics and Photonics, University of Central Florida, Orlando, USA. Dissertation: Polarization-independent liquid crystal devices Advisor: Prof. Shin-Tson Wu
08/1998-07/2000	**M.S. Institute of Electro-optical Engineering**, National Chiao Tung University, Hsinchu, Taiwan. Thesis: Improvement on the temperature sensitivity of a dual mode fiber sensing Advisor: Prof. Shu-Hsia Chen
09/1994-07/1998	**B.S., Physics**, Department of Physics, National Tsing Hua University, Hsinchu, Taiwan

PROFESSIONAL EXPERIENCE

08/2010-Present	Associate Professor: Department of Photonics, National Chiao Tung University, Taiwan
08/2006-07/2010	Assistant Professor: Department of Photonics, National Chiao Tung University, Taiwan
05/2006-07/2006	Post Doc: CREOL: The College of Optics and Photonics, University of Central Florida, Orlando, USA
07/2002-05/2006	Research assistant: CREOL: The College of Optics and Photonics, University of Central Florida, Orlando, USA
09/2001-06/2002	Research Assistant: Synchrotron Radiation Research Center, Hsinchu, Taiwan
09/2000-02/2001	Research Assistant: Institute of Atomic and Molecular Sciences, Academia Sinica, Taipei, Taiwan

Publicity or Special Invitation

03/2015	Interview in radio station: FM 96.7 UNI Radio (台北環宇廣播) for introducing share my experience in SPIE student chapter and some related stories.

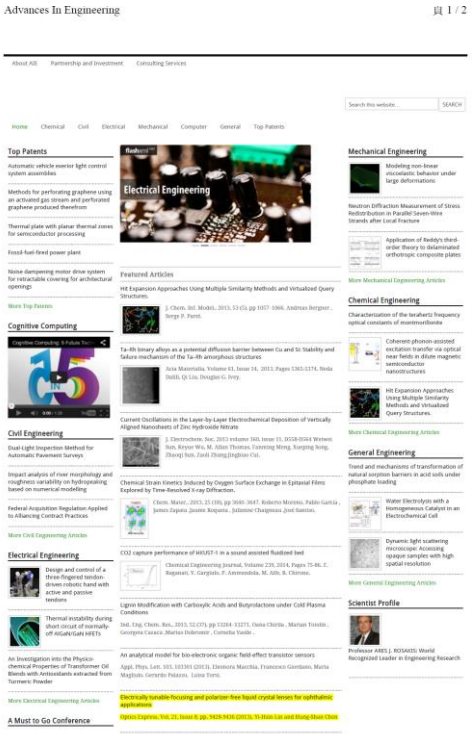
Name of program：交大幫幫忙; Broadcast time:2015/3/12; 18:00~19:00

02/2015 Invitation from Google X-lab (USA) for an invited talk of liquid crystal lenses

02/14/2015 Two of papers related to blue phase liquid crystals are selected as top download papers in Optical Materials Express.

10/ 2014 Invitation from Nature Nanotechnology to write an article about student chapter.
Reference: Yi-Hsin Lin, “A lesson in student chapters,” Nature Nanotechnology, Vol. 10 (Jan. 2015)

01/2014 Our paper published in Optic Express (“Electrically tunable-focusing and polarizer-free liquid crystal lenses for ophthalmic applications”) was selected as a feature paper in **“Advances in Engineering” http://advanceseng.com/**

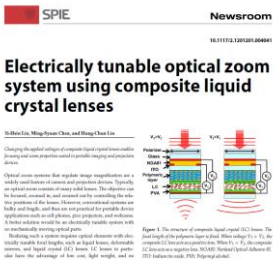


01/2014 Our publication « Electrically tunable-focusing and polarizer-free liquid crystal lenses for ophthalmic applications. » has been recommended on Pubadvanced by a project manager in Pfizer.

12/2013 Publisher In Tech informed that the book chapter of "A Polarizer-free Liquid Crystal Display Using Dye-doped Liquid Crystal Gels" with InTech in the book "New Developments in Liquid Crystals" has been accessed 5000 times.

05/2012 Special invitation from Nikon, Essilor and NEIJRC VP to talk about:
"Liquid Crystal-based Active Optics and Applications" in Japan.

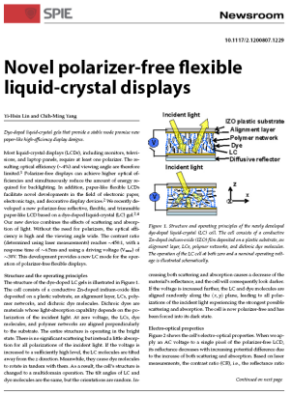
02/2012 The results were reported in SPIE newsroom "Electrically tunable optical zoom system using composite liquid crystal lenses"
http://spie.org/x84970.xml?ArticleID=x84970


SPIE Newsroom

Electrically tunable optical zoom system using composite liquid crystal lenses

6/2011 Research work of ": An electrically tunable focusing liquid crystal lens with a built-in planar polymeric lens" is reported in Physic Communications in Taiwan (台灣物理研究快報,由「國科會自然處物理研究推動中心」挑選)

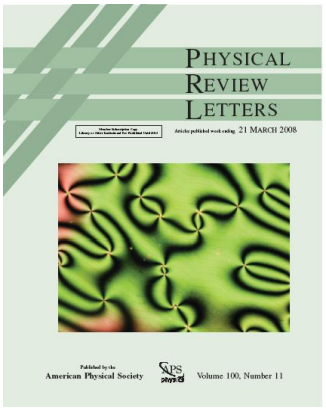
08/2008 The results were reported in SPIE Newsroom："Novel polarizer-free flexible liquid-crystal displays"
http://spie.org/x26487.xml?ArticleID=x26487


SPIE Newsroom

Novel polarizer-free flexible liquid-crystal displays

03/2008 Cover page in Physical Review Letter

H. Ren, S. T. Wu, and Yi-Hsin Lin
"In-situ observation of fringing field-induced phase separation in a liquid crystal and monomer mixture", Phys. Rev. Lett., 100 (11), 117801 (2008).



Awards	
8/2013	Best advisor for undergraduates (績優導師)
06/2011	2011 Tin Ka Ping Teaching Award
06/ 2010	NCTU Teaching Award
06/ 2010	2010 Tin Ka Ping Teaching Award
08/ 2009	2009 CMO Award for Advising Graduate Student
06/ 2009	2009 Tin Ka Ping Teaching Award
06/ 2009	2009 ECE Excellent Teaching Award
05/ 2008	Glenn H. Brown Prize; International Liquid Crystal Society
10/2008	NCTU Award for important academic achievements

Editorial Board	
12/2012- present	Editorial Board in Optics (Science Publishing Group journal)
3/ 2012 to present	Editorial Board in Dataset Papers in Condensed Matter Physics
07/2011	Associate editor for special issue “Optically- isotropic Liquid Crystals and Devices” of Journal of the SID (JSID)
03/2011~ present	Editorial Board in Transactions of Electrical and Electronic Materials (TEEM, ISSN 1229-7607) **http://www.transeem.org/main/**

Services in Academia Society	
2014/10-present	Program Committee for the FiO 1: Optical Design, Fabrication and Instrumentation Subcommittee of the Frontiers in Optics/Laser Science 2015 Conference (18-22 October, 2015 in San Jose, California.) www.frontiersinoptics.org.
10/2013- present	Scientific Advisory Board of the OLC (Optics of Liquid Crystal)
10/2013- present	SPIE Membership Committee
10/2013- present	SPIE Education Committee
10/2013- present	Program committee of Emerging Liquid Crystal Technologies Conference of SPIE Photonics West
5/2013 to present	International Program Committee for International Conference on Photonics, Optics and Laser Technology" - PHOTOPTICS http://www.photoptics.org/
2013-present	International Meeting on Information Display - Program Committee
2013	2nd Symposium on Liquid Crystal Photonics - Program Committee
2013	6th IEEE/ICAIT 2013 (International Conference on Advanced Infocomm Technology 2013) - technical program committee
2011-present	Displays Sub-Committee members in IEEE Photonics Society Annual Meeting
08/2006-present	Chair of Membership Committee for Taiwan Liquid crystal Society (ROC Taiwan LCS)
2006-present	Consultant for SPIE NCTU Student Chapter

International Collaborations	
8/2015-present	Collaborate and technical transfer with company for developing flexible liquid crystal contact lenses
2/2015-present	Collaborate with Dr. Ozan Cakmakci in Google X-lab (USA) for developing aspherical LC lenses
2014-present	Collaborate with Prof. Guoqiang Li in Ohio University (USA) for developing new structure of ophthalmic lenses
6/2014-present	Collaborate with Prof. Bahram Javidi in University of Connecticut (USA) for 3D integral imaging system using liquid crystal lenses.
2014-present	Collaborate with Prof. Hongwen Ren, Chonbuk National University (Korea) for developing tunable iris
3/2014-present	Collaborate with Prof. Seung Hee Lee, Chonbuk National University (Korea) for developing new polarization independent phase modulation

12/2013-present	Collaborate with Prof. Vladimir G. Chigrinov in Hong Kong University of Science and Technology for developing bistable liquid crystal lenses.
2012-2013	Collaborate with Prof. Neil Collings in University of Cambridge (UK) for holographic projection displays
2011-2014	Collaborate and technical transfer with Nikon and Essilor International Joint Research Center Co. Ltd.(Japan) for developing polarization independent liquid crystal phase modulations

PUBLICATIONS

Book Chapter:

1. Yi-Hsin Lin and Yu-Shih Tsou, "Liquid crystal devices for photovoltaic systems", Solar Power: Technologies, Environmental Impacts and Future Prospects, Ch5, Nova Science Publishers, Inc. (2014) ISBN:978-1-63321-317-3
2. Yi-Hsin Lin and Michael Chen, "Current trend of optics and photonics" Book Chapter, Ch15, p337-354, Springer (2014)
3. Yi-Hsin Lin, Jhih-Ming Yang, Hung-Chun Lin, and Jing-Nuo Wu, "A polarizer-free liquid crystal display using dye-doped liquid crystal gels", New Developments in Liquid Crystals, G.V. Tkachenko, Editor. 2009, In-Teh: Vukovar. p. 128-146 (2009).

Journal Papers:

1. Yi-Hsin Lin, Kai-Han Chang, Wei-Lin Chu, Yu-Shih Tsou, Li-Ching Wu, and Chien-Feng Li "A biosensing device for high-density lipoprotein in human serum based on droplet manipulation on a liquid crystal and polymer composite film" (paper in preparation)
2. Po-Ju Chen, Michael Chen, Shih-Ya Ni, Hung-Shan Chen, and Yi-Hsin Lin*, "Influence of alignment layers on crystal growth of polymer-stabilized blue phase liquid crystals" Optical Materials Express 6(4), 1003-1010 (2016)
3. Hung-Shan Chen, Yu-Jen Wang, Po-Ju Chen and Yi-Hsin Lin*, "Electrically adjustable location of a projected image in augmented reality via a liquid-crystal lens", Optics Express **23**(22), 28154-28162 (2015)
4. Yu-Jen Wang, Xin Shen, Yi-Hsin Lin, and Bahram Javidi*, "Extended depth-of-field 3D endoscopy with synthetic aperture integral imaging using an electrically tunable focal-length liquid-crystal lens" Optics Letter **40** (15), 3564-3567 (2015)
5. Ji Hoon Yu, Hung-Shan Chen, Po-Ju Chen, No Hyun Park, Ki Hoon Song, Young Jin Lim, Hongwen Ren, Yi-Hsin Lin, and Seung Hee Lee* "Electrically tunable microlens arrays based on polarization-independent optical phase of nano liquid crystal droplets dispersed in polymer matrix" Optics Express **23** (13), 17337-17344 (2015)
6. Miao Xu, Hongwen Ren*, and Yi-Hsin Lin, "Electrically actuated liquid iris" Optics Letters **40**(5), pp.831-834(2015)

7. Hung-Shan Chen, Yu-Jen Wang, Chia-Ming Chang, and Yi-Hsin Lin*, "A polarizer-free liquid crystal lens exploiting an embedded-multilayered structure" Photonics Technology Letters, IEEE **27**(8) pp.899,902(2015)
8. Hung-Shan Chen, Yi-Hsin Lin*, Chia-Ming Chang, Yu-Jen Wang, Abhishek Kumar Srivastava, Jia Tong Sun, and Vladimir Grigorievich Chigrinov, "A polarized bifocal switch based on liquid crystals operated electrically and optically," J. Appl. Phys. **117**, 044502 (2015)
9. Xin Shen, Yu-Jen Wang, Hung-Shan Chen, Xiao Xiao, Yi-Hsin Lin, and Bahram Javidi*, "Extended Depth-of-Focus 3D Micro Integral Imaging Display using a Bifocal Liquid Crystal Lens," Optics Letters **40**(4) pp.528-541(2015)
10. Yi-Hsin Lin*, "A lesson in student chapters," Nature Nanotechnology, Vol. 10, 100 (Jan. 2015)
11. Yi-Hsin Lin*, Hung-Shan Chen and Ming-Syuan Chen "Electrically Tunable Liquid Crystal Lenses and Applications", Molecular Crystals and Liquid Crystals **596**(1),12-21 (2014)
12. Hung-Shan Chen*, Ming-Syuan Chen and Yi-Hsin Lin,"Electrically Tunable Ophthalmic Lenses for Myopia and Presbyopia Using Liquid Crystals", Molecular Crystals and Liquid Crystals **596**(1), 88-96(2014)
13. Hung-Shan Chen, Michael Chen, Chia-Ming Chang, Yu-Jen Wang, and Yi-Hsin Lin*, "Simulation Study on Polarization-Independent Microlens Arrays Utilizing Blue Phase Liquid Crystals with Spatially-Distributed Kerr Constants," Micromachines **5** (4), 859-867 (2014)
14. Hung-Shan Chen, Yi-Hsin Lin*, Abhishek Kumar Srivastava, Vladimir Grigorievich Chigrinov, Chia-Ming Chang, and Yu-Jen Wang, "A large bistable negative lens by integrating a polarization switch with a passively anisotropic focusing element," Optics Express **22** (11), 13138-13145 (2014)
15. Ming-Syuan Chen, Po-Ju Chen, Michael Chen, and Yi-Hsin Lin*, "An electrically tunable imaging system with separable focus and zoom functions using composite liquid crystal lenses," Optics Express **22** (10), 11427-11435 (2014)
16. Ren Chung Liu, Vera Marinova*, Shiuan Huei Lin, Ming-Syuan Chen, Yi-Hsin Lin, and Ken Yuh Hsu, "Near-infrared sensitive photorefractive device using polymer dispersed liquid crystal and BSO:Ru hybrid structure," Opt. Lett. **39** (11), 3320-3323 (2014)
17. Michael Chen, Chyong-Hua Chen*, Yinchieh Lai, Yan-qing Lu, and Yi-Hsin Lin, "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 (2014)
18. Ming-Syuan Chen, Neil Collings*, Hung-Chun Lin, and Yi-Hsin Lin, "A Holographic Projection System With an Electrically Adjustable Optical Zoom and a Fixed Location of Zeroth-Order Diffraction," Journal of Display Technology **10** (6), 450-455 (2014) **http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=6727423**
19. Michael Chen, Yi-Hsin Lin*, Hung-Shan Chen, and Hung-Yuan Chen, "Electrically assisting crystal growth of blue phase liquid crystals," Optical Materials Express **4** (5), 953-959 (2014)
20. Michael Chen, Chyong-Hua Chen, Yin-Chieh Lai, and Yi-Hsin Lin*, "An Electrically Tunable Liquid Crystal Lens for Fiber Coupling and Variable Optical Attenuation," Electrical Electronic System **3** (2), 1000124 (2014) doi:10.4172/2332-0796.1000124

21. Hung-Shan Chen, and Yi-Hsin Lin*, "An endoscopic system adopting a liquid crystal lens with an electrically tunable depth-of-field," Optics Express **21** (15), 18079-18088 (2013)
    This paper was selected by Virtual Journal for Biomedical Optics. (VJBO), Vol 8, Issue 8, Sep 4, 2013
22. Yu-Shih Tsou, Kai-Han Chang, and Yi-Hsin Lin*, "A droplet manipulation on a liquid crystal and polymer composite film as a concentrator and a sun tracker for a concentrating photovoltaic system," Journal of Applied Physics **113** (24), 244504 (2013)
23. Yi-Hsin Lin*, and Hung-Shan Chen, "Electrically tunable-focusing and polarizer-free liquid crystal lenses for ophthalmic applications," Optics Express **21** (8), 9428-9436 (2013)
    This paper was selected by Virtual Journal for Biomedical Optics. (VJBO) Vol. 8, Iss. 5, 2013]
24. Vera Marinova*, Ren Chung Liu, Shiuan Huei Lin, Ming-Syuan Chen, Yi-Hsin Lin, and Ken Yuh Hsu, "Near-infrared properties of Rh-doped Bi12TiO20 crystals for photonic applications," Optics Letters **38** (4), 495-497 (2013)
25. Yi-Hsin Lin*, Ting-Yu Chu, Yu-Shih Tsou, Kai-Han Chang, and Ya-Ping Chiu, "An electrically switchable surface free energy on a liquid crystal and polymer composite film," Applied Physics Letters **101** (23), 233502 (2012)
26. Yu-Shih Tsou, Yi-Hsin Lin*, and An-Chi Wei, "Concentrating Photovoltaic System Using a Liquid Crystal Lens," IEEE Photonics Technology Letters **24 (24)**, 2239-2242 (2012)
27. Hung-Chun Lin, Neil Collings*, Ming-Syuan Chen, and Yi-Hsin Lin, "A holographic projection system with an electrically tuning and continuously adjustable optical zoom," Optics Express **20** (25), 27222-27229 (2012)
28. Hung-Shan Chen, Shih-Ya Ni, and Yi-Hsin Lin*, "An experimental investigation of electrically induced-birefringence of Kerr effect in polymer-stabilized blue phase liquid crystals resulting from orientations of liquid crystals," Applied Physics Letters **101** (9), 093501 (2012)
29. Hung-Shan Chen, Yi-Hsin Lin*, Chun-Hung Wu, Michael Chen, and Hsu-Kuan Hsu, "Hysteresis-free polymer-stabilized blue phase liquid crystals using thermal recycles," Optical Materials Express **2** (8), 1149-1155 (2012)
30. Yi-Hsin Lin*, Ming-Syuan Chen, Wei-Chih Lin, and Yu-Shih Tsou, "A polarization-independent liquid crystal phase modulation using polymer-network liquid crystals in a 90 degrees twisted cell," Journal of Applied Physics **112** (2), 024505 (2012)
31. Yi-Hsin Lin*, and Ming-Syuan Chen, "A Pico Projection System With Electrically Tunable Optical Zoom Ratio Adopting Two Liquid Crystal Lenses," Journal of Display Technology **8** (7), 401-404 (2012)
32. Yi-Hsin Lin*, Hung-Shan Chen, and Tsung-Han Chiang, "A reflective polarizer-free display using dye-doped polymer-stabilized blue-phase liquid crystals," Journal of the Society for Information Display **20** (6), 333-336 (2012)
33. Hung-Chun Lin, and Yi-Hsin Lin*, "An electrically tunable-focusing liquid crystal lens with a low voltage and simple electrodes," Optics Express **20** (3), 2045-2052 (2012)
34. Yi-Hsin Lin*, Ting-Yu Chu, Wei-Lin Chu, Yu-Shih Tsou, Ya-Ping Chiu, Farn Lu, Wan-Chen Tsai, and Shin-Tson Wu, "A Sperm Testing Device on a Liquid Crystal and

Polymer Composite Film," Journal of Nanomedicine & Nanotechnology **S9**:001 (2011) DOI:10.4172/2157-7439.S9-001; ISSN:2157-7439

35. Hung-Chun Lin, Ming-Syuan Chen, and Yi-Hsin Lin*, "An Electrically Tunable Focusing Pico projection System Based on a Liquid Crystal Lens Adopting a Liquid Crystal and Polymer Composite Film," Journal of Nonlinear Optical Physics & Materials **20** (4), 477-484 (2011) DOI: 10.1142/S0218863511006273
36. Hung-Chun Lin, Ming-Syuan Chen, and Yi-Hsin Lin*, "A Review of Electrically Tunable Focusing Liquid Crystal Lenses," Transactions on Electrical and Electronic Materials **12** (6), 234-240 (2011) **(Invited review paper)** DOI: http://dx.doi.org/10.4313/TEEM.2011.12.6.
37. Yi-Hsin Lin*, and Yu-Shih Tsou, "A polarization independent liquid crystal phase modulation adopting surface pinning effect of polymer dispersed liquid crystals," Journal of Applied Physics **110** (11), 114516 (2011)
38. Yi-Hsin Lin*, Hung-Shan Chen, Chun-Hung Wu, and Hsu-Kuan Hsu, "Measuring electric-field-induced birefringence in polymer stabilized blue-phase liquid crystals based on phase shift measurements," Journal of Applied Physics **109** (10), 104503 (2011)
39. Yi-Hsin Lin*, Ming-Syuan Chen, and Hung-Chun Lin, "An electrically tunable optical zoom system using two composite liquid crystal lenses with a large zoom ratio," Optics Express **19** (5), 4714 (2011)
40. Yi-Hsin Lin*, Hung-Shan Chen, Tsung-Han Chiang, Chun-Hung Wu, and Hsu-Kuan Hsu, "A reflective polarizer-free electro-optical switch using dye-doped polymer-stabilized blue phase liquid crystals," Optics Express **19** (3), 2556 (2011)
41. Hung-Chun Lin, and Yi-Hsin Lin*, "An electrically tunable focusing liquid crystal lens with a built-in planar polymeric lens," Applied Physics Letters **98** (8), 083503 (2011)
42. Hung-Chun Lin, Ming-Syuan Chen, and Yi-Hsin Lin*, "An Electrically Tunable Focusing Pico Projector Using a Liquid Crystal Lens as an Active Optical Element," Molecular Crystals and Liquid Crystals **544**, 150-156 (2011)
43. Hung-Chun Lin, and Yi-Hsin Lin*, "An Electrically Tunable Focusing Pico-Projector Adopting a Liquid Crystal Lens," Japanese Journal of Applied Physics **49** (10),102502 (2010)
44. Ya-Ping Chiu*, Cheng-Yu Shen, and Yi-Hsin Lin, "Characteristics of Electrically Switchable Wettability Surfaces of Liquid Crystal and Polymer Composite Films," Japanese Journal of Applied Physics **49** (7), 071604 (2010)
45. Hung-Chun Lin, and Yi-Hsin Lin*, "A fast response and large electrically tunable-focusing imaging system based on switching of two modes of a liquid crystal lens," Applied Physics Letters **97** (6), 063505 (2010)
46. Yi-Hsin Lin*, Jiong-Kuan Li, Ting-Yu Chu, and Hsu-Kuan Hsu, "A bistable polarizer-free electro-optical switch using a droplet manipulation on a liquid crystal and polymer composite film," Optics Express **18** (10), 10104-10111 (2010)
47. Ya-Ping Chiu*, Cheng-Yu Shen, Wen-Ching Wang, Ting-Yu Chu, and Yi-Hsin Lin, "Electrically surface-driven switchable wettability of liquid crystal/polymer composite film," Applied Physics Letters **96** (13), 131902 (2010)
48. Yi-Hsin Lin*, Hung-Shan Chen, Hung-Chun Lin, Yu-Shih Tsou, Hsu-Kuan Hsu, and Wang-Yang Li, "Polarizer-free and fast response microlens arrays using

polymer-stabilized blue phase liquid crystals," Applied Physics Letters **96** (11), 113505 (2010)

49. Yi-Hsin Lin*, Hung-Chun Lin, and Jhih-Ming Yang, "A Polarizer-Free Electro-Optical Switch Using Dye-Doped Liquid Crystal Gels," Materials **2** (4), 1662-1673 (2009) **(Invited paper)**
50. Yi-Hsin Lin*, Chih-Ming Yang, Chun-Hsiang Lo, Hung-Shan Chen, and Yung-Hsun Wu, "A polarizer-free flexible display using dye-doped liquid crystal gels," Journal of the Society for Information Display **17** (10), 821-826 (2009)**(Invited paper)**
51. Yi-Hsin Lin*, and Chih-Ming Yang, "A polarizer-free three step switch using distinct dye-doped liquid crystal gels," Applied Physics Letters **94** (14), 143504 (2009)
52. Jy-Shan Hsu*, Yi-Hsin Lin, Hung-Chun Lin, and Kei-Hsiung Yang, "Thermally-induced light leakage in in-plane-switching liquid crystal displays," Journal of Applied Physics **105** (3), 033503 (2009)
53. Yi-Hsin Lin*, Chih-Ming Yang, and Chun-Hsiang Lo, Yan-Rung Lin, Shie-Chang Jeng, and Chi-Chang Liao, "Polarizer-Free Gradient Dye-Doped Liquid Crystal Gels," Molecular Crystals and Liquid Crystals **511**, 1779-1788 (2009)
54. Yi-Hsin Lin*, Hongwen Ren, and Shin-Tson Wu, "Polarization-independent liquid crystal devices," Liquid Crystal Today **17**, 2-8 (2008) **(Invited paper)**
55. Yi-Hsin Lin*, Hongwen Ren, Yung-Hsun Wu, Shin-Tson Wu, Yue Zhao, Jiyu Fang, and Hung-Chun Lin, "Electrically tunable wettability of liquid crystal/polymer composite films," Optics Express **16 (22)**, 17591-17598 (2008) **(This paper was selected by Virtual Journal for Biomedical Optics, Vol. 3, Iss. 12)**
56. Hongwen Ren*, Shin-Tsong Wu, and Yi-Hsin Lin, "In-situ observation of fringing field-induced phase separation in a liquid-crystal-monomer mixture," Physical Review Letters **100** (11), 117801 (2008). **(This paper was chosen as a cover page)**
57. Yi-Hsin Lin*, Jhih-Ming Yang, Yan-Rung Lin, Shie-Chang Jeng, and Chi-Chang Liao, "A polarizer-free flexible and reflective electrooptical switch using dye-doped liquid crystal gels," Optics Express **16** (3), 1777-1785 (2008)
58. Hongwen Ren*, Shin-Tson Wu, and Yi-Hsin Lin, "Single glass substrate liquid crystal device using electric field-enforced phase separation and photo-induced polymerization," Applied Physics Letters **90** (19), 191105 (2007)
59. Tien-Jung Chen*, and Yi-Hsin Lin, "Use of modal interference for probing birefringence induced in a bent optical fiber," Optics Letters **31** (22), 3231-3233 (2006)
60. Hongwen Ren, Yi-Hsin Lin, and Shin-Tson Wu*, "Linear to axial or radial polarization conversion using a liquid crystal gel," Applied Physics Letters **89** (5), 051114 (2006)
61. Hongwen Ren, Yi-Hsin Lin, and Shin-Tson Wu*, "An adaptive lens using liquid crystal concentration redistribution," Applied Physics Letters **88** (19), 191116 (2006)
62. Yi-Hsin Lin*, Hongwen Ren, Sebastian Gauza, Yung-Hsun Wu, Ying Zhou, and Shin-Tson Wu, "High contrast and fast response polarization-independent reflective display using a dye-doped dual-frequency liquid crystal gel," Molecular Crystals and Liquid Crystals **453**, 371-378 (2006)
63. Yung-Hsun Wu*, Yi-Hsin Lin, Ju-Hyun Lee, Hongwen Ren, Xiangyi Nie, and Shin-Tson Wu, " Molecular Alignment of Axially-Symmetric Sheared Polymer Network Liquid Crystals," Molecular Crystals and Liquid Crystals **454**, 343-354 (2006)
64. Hongwen Ren, Yi-Hsin Lin, and Shin-Tson Wu*, "Flat polymeric microlens array," Optics Communications **261**, 296-299 (2006)

65. Yi-Hsin Lin*, Hongwen Ren, Sebastian Gauza, Yung-Hsun Wu, Yue Zhao, Jiyu Fang, and Shin-Tson Wu, "IPS-LCD using a glass substrate and an anisotropic polymer film," Journal of Display Technology **2**(1), 21-25 (2006)
66. Hongwen Ren*, Yi-Hsin Lin, and Shin-Tson Wu, "Polarization independent and fast-response phase modulators using double-layered liquid crystal gels," Applied Physics Letters **88** (6), 061123 (2006)
67. Yi-Hsin Lin*, Hongwen Ren, Sebastian Gauza, Yung-Hsun Wu, Xiao Liang, and Shin-Tson Wu, "Reflective direct-view displays using a dye-doped dual-frequency liquid crystal gel," Journal of Display Technology **1** (2), 230-233 (2005)
68. Jun Li*, Greg Baird, Yi-Hsin Lin, Hongwen Ren, and Shin-Tson Wu, "Refractive index matching between liquid crystals and photopolymers," Journal of the Society for Information Display **13** (12), 1017-1026 (2005)
69. Jiun-Haw Lee*, Xinyu Zhu, Yi-Hsin Lin, Wing Kit Choi, Tien-Chun Lin, Sheng-Chih Hsu, Hoang-Yan Lin, and Shin-Tson Wu, "High ambient-contrast-ratio display using tandem reflective liquid crystal display and organic light-emitting device," Optics Express **13** (23), 9431-9438 (2005)
70. Hongwen Ren*, Yi-Hsin Lin, Chien-Hui Wen, and Shin-Tson Wu, "Polarization-independent phase modulation of a homeotropic liquid crystal gel," Applied Physics Letters **87** (19), 191106 (2005)
71. Yi-Hsin Lin*, Hongwen Ren, Yung-Hsun Wu, Yue Zhao, Jiyu Fang, Zhibing Ge, and Shin-Tson Wu, "Polarization-independent liquid crystal phase modulator using a thin polymer-separated double-layered structure," Optics Express **13** (22), 8746-8752 (2005)
72. Yung-Hsun Wu*, Ju-Hyun Lee, Yi-Hsin Lin, Hongwen Ren, and Shin-Tson Wu, "Simultaneous measurement of phase retardation and optic axis of a phase compensation using an axially-symmetric sheared polymer network liquid crystal," Optics Express **13** (18), 7045-7051 (2005) **(This paper was selected as a feature article)**
73. Yi-Hsin Lin*, Hongwen Ren, Yun-Hsing Fan, Yung-Hsun Wu, and Shin-Tson Wu, "Polarization-independent and fast-response phase modulation using a normal-mode polymer-stabilized cholesteric texture," Journal of Applied Physics **98** (4), 043112 (2005)
74. Yung-Hsun Wu*, Xiao Liang, Yan-Qing Lu, Fang Du, Yi-Hsin Lin, and Shin-Tson Wu, "Variable optical attenuator with a polymer-stabilized dual-frequency liquid crystal," Applied Optics **44** (20), 4394-4397 (2005)
75. Xiangyi Nie*, Yi-Hsin Lin, Thomas X. Wu, Haiying Wang, Zhibing Ge, and Shin-Tson Wu, "Polar anchoring energy effect and measurement of vertically-aligned liquid crystal cells," Journal of Applied Physics **98** (1), 013516 (2005)
76. Yung-Hsun Wu*, Yi-Hsin Lin, Hongwen Ren, Xiangyi Nie, Ju-Hyun Lee, and Shin-Tson Wu, "Axially-symmetric sheared polymer network liquid crystals," Optics Express **13**(12), 4638-4644 (2005)
77. Hongwen Ren*, Yi-Hsin Lin, Yun-Hsing Fan, and Shin-Tson Wu, "Polarization-independent phase modulation using a polymer-dispersed liquid crystal," Applied Physics Letters **86** (14), 141110 (2005)
78. Hongwen Ren, Yun-Hsing Fan, Yi-Hsin Lin, and Shin-Tson Wu*, "Tunable-focus microlens arrays using nanosized polymer-dispersed liquid crystal droplets," Optics Communications **247** (1-3), 101-106 (2004)
79. Hongwen Ren*, Janet R. Wu, Yun-Hsing Fan, Yi-Hsin Lin, and Shin-Tson Wu, "Hermaphroditic liquid-crystal microlens," Optics Letters **30** (4), 376-378 (2005)

80. Yi-Hsin Lin*, Hongwen Ren, Yung-Hsun Wu, Xiao Liang, and Shin-Tson Wu, "Pinning effect on the phase separation dynamics of thin polymer-dispersed liquid crystals" Optics Express **13** (2), 468-474 (2005) **(This paper was selected as a feature article)**
81. Yi-Hsin Lin*, Hongwen Ren, Kuan-Hsu Fan-Chiag, Wing-Kit Choi, Sebastian Gauza, Xinyu Zhu, and Shin-Tson Wu, "Tunable-focus cylindrical liquid crystal lenses," Japanese Journal of Applied Physics **44** (1A), 243-244 (2005)
82. Yung-Hsun Wu*, Yi-Hsin Lin, Yan-Qing Lu, Hongwen Ren, Yun-Hsing Fan, Janet R. Wu, and Shin-Tson Wu, "Submillisecond response variable optical attenuator based on sheared polymer network liquid crystal," Optics Express **12** (25), 6382-6389 (2004)
83. Hongwen Ren*, Yi-Hsin Lin, Yun-Hsing Fan, and Shin-Tson Wu, "In-plane switching liquid crystal gel for polarization independent light switch," Journal of Applied Physics **96** (7), 3609-3611 (2004)
84. Yun-Hsing Fan*, Hongwen Ren, Xiao Liang, Yi-Hsin Lin, and Shin-Tson Wu, "Dual-frequency liquid crystal gels with submillisecond response time," Applied Physics Letters **85** (13), 2451-2453 (2004)
85. Yi-Hsin Lin*, Hongwen Ren, and Shin-Tson Wu, "High Contrast Polymer-Dispersed Liquid Crystal in a 90 degrees twisted cell," Applied Physics Letters **84** (20), 4083-4085 (2004)
86. Yan-qing Lu*, Fang Du, Yi-Hsin Lin, and Shin-Tson Wu, "Variable optical attenuator based on polymer stabilized twisted nematic liquid crystal," Optics Express **12** (7), 1221-1227 (2004)
87. Yun-Hsing Fan*, Yi-Hsin Lin, Hongwen Ren, Sebastian Gauza, and Shin-Tson Wu, "Fast-response and scattering-free polymer network liquid crystals for infrared light modulators," Applied Physics Letters **84** (8), 1233-1235 (2004)
88. Ying-Huang Lai, Chuin-Tih Yeh, Yi-Hsin Lin, and Wei-Hsiu Hung*, "Adsorption and thermal decomposition of H2S on Si(100)," Surface Science **519** (1-2), 150-156 (2002)

Conference proceedings

International conference

1. Yi-Hsin Lin, Hung-Shan Chen, Yu-Jen Wang, Chia-Ming Chang, "A liquid crystal and polymer composite film for liquid crystal lenses" Proc. SPIE 9384-34, Emerging Liquid Crystal Technologies X, SPIE Photonic West, San Francisco, California, USA. (2015) (**Invited talk**)
2. Hung-Shan Chen, Yi-Hsin Lin*, Chia-Ming Chang, Yu-Jen Wang, Abhishek Kumar Srivastava, Jia Tong Sun, and Vladimir Grigorievich Chigrinov,"A polarized liquid crystal lens with electrically switching mode and optically written mode", Proc. SPIE 9384-37, Emerging Liquid Crystal Technologies X, SPIE Photonic West, San Francisco, California, USA. (2015)
3. Hung-Shan Chen, Yi-Hsin Lin, Chia-Ming Chang, Yu-Jen Wang, Abhishek Kumar Srivastava, Jia Tong Sun, and Vladimir Grigorievich Chigrinov, "An Optically Rewritable and Electrically Switchable Liquid Crystal Lens," LTJ-2-2, PHOSM 2014, Hong Kong, China (Oral)
4. Chia-Ming Chang, Hung-Shan Chen, Yi-Hsin Lin, Yu-Jen Wang, Abhishek Kumar Srivastava, Vladimir Grigorievich Chigrinov, "A bistable negative lens by integrating a polarization switch of ferroelectric liquid crystal s with a passively anisotropic focusing

element," LTJ-2-3, PHOSM 2014, Hong Kong, China (Oral)

5. Yi-Hsin Lin*, Hung-Shan Chen, Yu-Jen Wang, Chia-Ming Chang, "Large aperture and polarizer-free liquid crystal lenses for ophthalmic applications", Proc. SPIE 9182-36, Liquid Crystals Technologies XVIII, SPIE Optics+Photonics, San Diego, California, USA. (2014) (**Invited Talk**)
6. Yi-Hsin Lin, Hung-Shan Chen, and Ming-Syuan Chen, "Liquid Crystal for Ophthalmic Lenses and Biosensing Applications," SID Display Week, LC Beyond Displays II, June 1-6, San Diego, California, USA. (2014) (**Invited Talk**)
7. Yi-Hsin Lin, Hung-Shan Chen, Yu-Jen Wang, and Chia-Ming Chang, "Liquid crystal phase modulations for ophthalmic lenses," Symposium on Liquid Crystal Photonics, Shanghai, China. (2014) (**Invited talk**)
8. Yi-Hsin Lin, Kai-Han Chang, Yu-Shih Tsou and Wei-Lin Chu, "A Human Blood Sensor on a Liquid Crystal and Polymer Composite Film" The 2nd Symposium on Liquid Crystal Photonics, Chengdu, Sichuan, China. (2013) (**Invited talk**)
9. Y. H. Lin, H. S. Chen, and M. S. Chen, "Electrically-tunable liquid crystal lenses and applications," Proc. SPIE 8642, Emerging Liquid Crystal Technologies VIII, 86420C, SPIE Photonic West, San Francisco, California, USA. (2013) (**Invited talk**)
10. Y. S. Tsou, K. H. Chang, Y. H. Lin, "Biosensing based on a liquid crystal and polymer composite film," CC3DMR, Ramada Jeju, Korea. (2013) (**Invited talk**)
11. Yi-Hsin Lin, Hung-Chun Lin, and Ming-Syuan Chen, "Electrically Tunable Liquid Crystal Lenses and Applications" International Display Manufacturing Conference (2013) **(Invited talk)**
12. Yi-Hsin Lin, Kai-Han Chang, Wei-Lin Chu, Yu-Shih Tsou, Li-Ching Wu, and Chien-Feng Li, "A biosensor of high-density lipoprotein of human serum on a liquid crystal and polymer composite film" Proc. SPIE 8828, Liquid Crystals XVII, 88280I, SPIE Optics+Photonics, San Diego, USA. (2013) (**Invited talk**)
13. N. Collings, Y. H. Lin, H. C. Lin and M. S. Chen, "Tunable liquid crystal lens for a holographic projection system," Proc. SPIE 8828, Liquid Crystals XVII, 88281B, SPIE Optics+Photonics, San Diego, USA. (2013)
14. H. S. Chen, M. S. Chen, and Y. H. Lin, "An electrically tunable depth-of-field endoscope using a liquid crystal lens as an active focusing element," Proc. SPIE 8828, Liquid Crystals XVII, 88281C, SPIE Optics+Photonics, San Diego, USA. (2013)
15. M. S. Chen, P. J. Chen and Y. H. Lin, "An electrically tunable optical zoom system with separated focusing and zooming functions," Proc. SPIE 8828, Liquid Crystals XVII, 88281D, SPIE Optics+Photonics, San Diego, USA. (2013)
16. Y. H. Lin, M. Chen, H. S. Chen and S. Y. Ni, "A reflective polarizer-free and hysteresis-free display using dye-doped polymer-stabilized blue phase liquid crystals," 07-1009, IMID, Daegu, Korea. (2013) **(Invited talk**)
17. Y. H. Lin, H. S. Chen, and M. S. Chen, "Electrically-tunable liquid crystal lenses and applications," I-13, OLC, Honolulu, Hawaii, USA. (2013) **(Invited talk**)
18. M. S. Chen, K. H. Chang, W. L. Chu, and Y. S. Tsou, "Bio-sensing of high-density lipoprotein of human serum based on a droplet manipulation on a liquid crystal and polymer composite film," B5, OLC, Honolulu, Hawaii, USA. (2013)
19. H. S. Chen, M. S. Chen, and Y. H. Lin, "Electrically tunable eyeglasses for myopia and presbyopia based on an artificial accommodation of human eye," PII-10, OLC, Honolulu, Hawaii, USA. (2013)

20. H. S. Chen, C. H. Wu, M. Chen, and Y. H. Lin, "The Study on the Crystal Growth of Blue Phase Liquid Crystals," International Liquid Crystal Conference 2012 (Mainz, Germany, 19-24 August 2012) (Oral, 5551_0411)
21. M. S. Chen, H. C. Lin, and Y. H. Lin, "An electrically tunable optical zoom system using three liquid crystal lenses with a constant zoom ratio," International Liquid Crystal Conference (Mainz, Germany, 19-24 August 2012) (Poster, PIII-158)
22. H. S. Chen, C. H. Wu, M. Chen, and Y. H. Lin, "Hysteresis Effect of Polymer Stabilized Blue Phase Liquid Crystal," SPIE Optics + Photonics (San Diego, California, 12 - 16 August 2012) (Oral, 8475-27). (**Invited talk**)
23. Yu-Shih Tsou, Yi-Hsin Lin, and An-Chi Wei, "A concentration photovoltaic system adopting a liquid crystal light modulation," Proc. SPIE 8475, Liquid Crystals XVI, 847515 SPIE Optics + Photonics San Diego, California, USA. (2012)
24. M. S. Chen, W. C. Lin, Y. S. Tsou, and Y. H. Lin, "A polarization-independent liquid crystal phase modulation using polymer-network liquid crystal with orthogonal alignment layers," SPIE Optics + Photonics (San Diego, California, 12 - 16 August 2012) (Oral, 8475-28)
25. Y. H. Lin, M. S. Chen, and H. C. Lin, "Electrically-tunable optical zoom systems by using liquid crystal lenses," SPIE Photonics West (San Francisco, CA,USA 21 - 26 January 2012) (Oral, 8280-25). (**Invited talk**)
26. Y. H. Lin and T. Y. Chu, "A polarizer-free, color-filter-free, bistable and reflective display using a liquid crystal and polymer composite film", IEEE Photonics Society Annual Meeting 2011 (Arlington, Virginia, 9 - 13 October 2011) (Oral, WBB2).
27. M. S. Chen, H. C. Lin, and Y. H. Lin, "An electrically tunable LCOS pico projector with optical zoom", IEEE Photonics Society Annual Meeting 2011 (Arlington, Virginia, 9 - 13 October 2011) (Oral, WI4).
28. Y. S. Tsou and Y. H. Lin, "A polarization independent liquid crystal microlens arrays adopting surface pinning effect of polymer dispersed liquid crystals", IEEE Photonics Society Annual Meeting 2011 (Arlington, Virginia, 9 - 13 October 2011) (Oral, WBB3).
29. Yi-Hsin Lin, "Applications of a switchable surface based on a liquid crystal and polymer composite film", 10th Mediterranean Workshop and Topical Meeting -Novel Optical Materials and Applications (Cetraro - Italy, June 05 - 11, 2011) (**Invited talk**)
30. Hung-Chun Lin and Yi-Hsin Lin, "An electrically tunable focusing liquid crystal lens adopting a liquid crystal and polymer composite film", 10th Mediterranean Workshop and Topical Meeting -Novel Optical Materials and Applications (Cetraro - Italy, June 05 - 11, 2011)
31. Hung-Chun Lin, Ming-Syuan Chen and Yi-Hsin Lin, "An Electrically Tunable Focusing LCOS Pico Projector Using a Liquid-Crystal Lens" 2011 Symposium of Information Display P.187 (LA, USA) (2011)
32. Hung-Shan Chen, Tsung-Han Chiang, Chun-Hung Wu, Hung-Yuan Chen and Yi-Hsin Lin "A Reflective Polarizer-free Display Using Dye-Doped Polymer-Stabilized Blue Phase Liquid Crystals" Society for Information Display (SID 2011, Los Angeles, U.S.A.) (Poster P.149).
33. Hung-Shan Chen, Tsung-Han Chiang, Chun-Hung Wu, Hsu-Kuan Hsu, and Yi-Hsin Lin, "Polarization independent and fast response phase modulation using polymer-stabilized blue phase liquid crystals" International Liquid Crystal Conference (July 11-16, Poland 2010)

34. Hung-Chun Lin and Yi-Hsin Lin, "An Electrically Tunable Focusing Pico Projector Using a Liquid Crystal Lens as an Active Optical Element" International Liquid Crystal Conference (July 11-16, Poland 2010)
35. Ting-Yu Chu, Jun-Lin Chen, Yu-Shih Tsou, *Hsu-Kuan Hsu, and Yi-Hsin Lin, "A Polarizer-free and Bistable Display Using a Droplet Translation on a Liquid Crystal and Polymer Composite Film" International Liquid Crystal Conference (July 11-16, Poland 2010)
36. Yi-Hsin Lin, Yu-Shih Tsou, Ting-Yu Chu, and Jun-Lin Chen, "Droplet manipulation on a liquid crystal and polymer composite film" 2010 SPIE Photonic Devices + Applications (2010) (**Invited talk**)
37. Yu-Shih Tsou, Ting-Yu Chu, Jun-Lin Chen, Wei-Lin Chu, Yu-Chih Huang, and Yi-Hsin Lin, Hsu-Kuan Hsu and Wang-Yang Li, "A Reflective Polarizer-free, Color-filter-free, and Bistable Display Using a Droplet Manipulation on a Liquid Crystal and Polymer Composite Film" 2010 Symposium of Information Display P.144 (May 23-28, Seattle, USA) (2010)
38. Yi-Hsin Lin, "A liquid crystal and polymer composite film and its applications" (**Invited talk**) One Day Workshop on "Liquid Crystals for Bio-Sensors" via Spring meeting of KIEEME (March 26th 2010, Chonbuk National University, Korea)
39. Farn Lu, Yi-Hsin Lin Wan-Chen Tsai, Jiong-Juan Li, Ting-Yu Chu, Hsu-Kuan Hsu, and Wang-Yang Li "The Dynamics of Human Sperm Droplets on a Liquid Crystal and Polymer Composite Film" Proc. SPIE 7618, 761811 (2010) [Photonic West 2010, 7618-36 **Oral presentation**]
40. Y. H. Lin, J. K. Lee, T. Y. Chu, H. K. Hsu, W. Y. Li, F. Lu, and W. C. Tsai, "Droplet manipulation on a liquid crystal and polymer composite film", Emerging Trends and Novel Materials in Photonics **(**October 7-9, 2009 in Delphi, Greece**)**
41. Y. H. Lin, J. K. Lee, T. Y. Chu, H. K. Hsu, W. Y. Li, F. Lu, and W. C, "Electrically tunable wettability of a liquid crystal and polymer composite film and its applications" 13th Topical Meeting on the Optics of Liquid Crystals(Sep 28 - Oct 2, 2009 Erice Italy)
42. Yi-Hsin Lin, Hung-Chun Lin, Jiong-Kuan Li, Hsu-Kuan Hsu and Wang-Yang Li, "A reflective polarizer-free display using a droplet manipulation on a liquid crystal and polymer composite film", Eurodisplay 2009 (**Invited talk**) (Sep 14th-17th, 2009 Rome, Italy)
43. Yi-Hsin Lin and Shin-Tson Wu, "Polarization-independent Liquid Crystal Devices", 2008 International Liquid Crystal Conference (ILCC2008) **Invited talk** (p.537)
44. Yi-Hsin Lin and Hung-Chun Lin, "Electrically Tunable Wettability Using Surface Orientation of Liquid Crystals of a Liquid Crystals/ Polymer Composites", 2008 International Liquid Crystal Conference (ILCC2008) (Oral presentation) (p.562)
45. Yi-Hsin Lin Jhih-Ming Yang, Chun-Hsiang Lo, Yan-Rung Lin, Shie-Chang Jeng, and Chi-Chang Liao, "Polarizer-free Gradient Dye-doped Liquid Crystal Gels", 2008 International Liquid Crystal Conference (ILCC2008) (Poster Number 6-POL20) (p.799)
46. Yi-Hsin Lin Jhih-Ming Yang, Yan-Rung Lin, Shie-Chang Jeng, and Chi-Chang Liao , "Polarizer-free flexible displays using dye-doped liquid crystal gels", 2008 International Display Research Conference (IDRC) **Invited talk**
47. Yi-Hsin Lin, Chih-Ming Yang, Yan-Rung Lin, Shie-Chang Jeng, and Chi-Chang Liao, "Reflective-Type Polarizer-Free Flexible Displays Using Dye-Doped Nematic Liquid-Crystal Gels", Society for Information Display 2008 International Symposium, Seminar and Exhibition in Los Angeles (SID) 2008, (Poster Number P.168)

48. Yi-Hsin Lin, Jhih-Ming Yang, Shie-Chang Jeng, Yan-Rung Lin, and Chi-Chang Liao, "Flexible and reflective polarizer-free liquid crystal displays using dye-doped liquid crystal gels", Proc. SPIE. 6911, 691108 (Jan 29, 2008)
49. Y. H. Lin, H. Ren, Y. H. Wu, and S. T. Wu, "Polarizer-free liquid crystal devices", Digest of Technical papers of 7th IMID, Volume 7, 980-981 (2007) Invited talk
50. Y. H. Lin, J. M. Yang, S. T. Wu, and C. C. Liao, "Polarizer-free liquid crystal displays", Asia Optical Fiber Communication & Optoelectronic Exposition & Conference (AOE) ,IEEE catalog number: 07EX1814, 31-33(2007) **Invited talk**
51. Y.-H. Lin, H. Ren,Y.-H. Wu, W.-Y. Li, X. Liang, and S.-T. Wu, "High Performance Reflective and Transflective Displays Using Guest-Host Liquid Crystal Gels", SID Tech. Digest **37**, 780-782 (San Francisco, CA, June 2006).
52. Y.-H. Wu, Y.-H. Lin, H. Ren and S.-T. Wu, "Simultaneous Phase Retardation and Optic Axis Measurements of A- and C-plates", SID Tech. Digest **37**, 732-735 (San Francisco, CA, June 2006).
53. H. Ren, Y.-H. Lin, and S.-T. Wu, "Polarization Independent and Fast Response Phase Modulators Using Orthogonally Orientated Liquid Crystal Gels", SID Tech. Digest **37**, 691-693 (San Francisco, CA, June 2006).
54. J.-H. Lee, X. Zhu, Y.-H. Lin, Z. Ge, W. K. Choi, K.-Y. Chen, M.-K. Wei, and S.-T. Wu, "Tandem OLED and Reflective LCD with a Microlens Array", SID Tech. Digest **37**, 68-70 (San Francisco, CA, June 2006).
55. Y. H. Wu, J. H. Lee, Y. H. Lin, H. Ren, and S. T. Wu, "A new method for simultaneous measurement of phase retardation and optical axis of a compensation film" (**Invited paper**) Proc. SPIE 6135, 613506 (Jan. 2006).
56. S. T. Wu, Y. H. Lin, H. Ren, Y, H, Wu, Y. Zhao, J. Fang, and S. Gauza, "Novel liquid crystal alignment layer using an anisotropic polymer film", (**Invited Talk**) The 61st Southwest and the 57th Southeast Joint Regional Meeting of the American Chemical society (Memphis, Nov. 1-4, 2005)
57. Y. H. Wu, Y. H. Lin, J. H. Lee, H. Ren, X. Nie and S.T. Wu, "Axially-symmetric sheared polymer network liquid crystals and applications", The 11th International topical meeting on optics of liquid crystal, 164 (Florida, Oct. 2-7, 2005)
58. Jun Li, Sebastian Gauza, Yi-Hsin Lin and S. T. Wu, "Origins of liquid crystal refractive indices", (**Invited Lecture**) Proc. of the 3rd student-organizing international mini-conference on information electronics system(SOIM-COE05), 103-106 (Sendai, Japan, Oct. 6-7, 2005)
59. Y. H. Lin, H. Ren, S. Gauza, Y.H. Wu, and S.T. Wu, "High contrast and fast response polarization-independent reflective display using a dye-doped dual-frequency liquid crystal gel", The 11th International topical meeting on optics of liquid crystal, 154 (Florida, Oct. 2-7, 2005)
60. Y. H. Lin, H. Ren, Y. H. Wu, X. Liang and S. T. Wu, "Surface pinning effect of thin polymer-dispersed liquid crystals",(**Invited Lecture**) Proc. Of the 3rd student-organizing international mini-conference on information electronics system (SOIM-COE05), 107-110 (Sendai, Japan, Oct. 6-7, 2005).
61. Y. H. Wu, Y. H. Lin, Y. Q. Lu, H. Ren, Y. H. Fan, J. R. Wu, and S.T. Wu, "Sheared polymer network liquid crystal for fast-response variable optical attenuators", Proc. SPIE, "Novel Optical Materials", 5936, 59360J (Aug. 22, 2005)

62. Y. H. Lin, H. Ren, S. Gauza, Y. H. Wu, and S. T. Wu,“ Single-substrate IPS-LCD using an anisotropic polymer film”, Proc. SPIE, ”Novel Optics”, 5936, 59360O (Aug. 20, 2005)
63. X. Nie, H. Wang, Z. Ge, T. X. Wu, Y. H. Lin, and S. T. Wu, “Polar anchoring energy measurement of vertically aligned liquid crystal cells”, SID Tech. Digest 36, 780-783 (Boston, MA, May 23-27, 2005).
64. Y. H. Lin, H. Ren, Y. H. Wu, X. Liang and S. T. Wu, “Surface anchoring effect on the morphology and performance of PDLC”, (**Invited Paper**) Proc. SPIE, "Emerging LC Technology", 5741, 74-82 (January 26-27, 2005).
65. Y. H. Lin, H. Ren, Y. H. Wu, X. Liang and S. T. Wu, “High contrast reflective display using a polymer-dispersed Liquid Crystal”, 17th IEEE/LEOS Annual Meeting, 1 39-40 (Puerto Rico, Nov. 8-11, 2004).
66. Y. H. Lin, H. Ren and S. T. Wu, “Twisted PDLC for high-contrast reflective display” SID Tech. Digest 35, 614-7 (2004).
67. Y. H. Fan, Y. H. Lin, H. Ren, S. Gauza and S. T. Wu,“ Fast-Response polymer network liquid crystals for optical communications” SID Tech. Digest 35, 1526-9 (2004).
68. S. Gauza, C. H. Wen, B. Tan, Y. H. Wu, Y. H. Lin and S. T. Wu “High-birefringnece and low-viscosity isothiocyaniane liquid crystals and applications to 50-μs response switching device” SID Tech. Digest 35, 1304-7 (2004).
69. T. J. Chen, Y. H. Lin and S. H. Chen, “Generation of TE_{01} and TM_{01} modes from doubly clad fiber with NLC outer cladding”,ILCC2002, P.387 (2002).

Domestic conference in Taiwan:

1. Li-Lun Hu, Ming-Syuan Chen, and Yi-Hsin Lin " A mechanically tunable achromatic phase retarder exploiting liquid crystal polymeric films " 2015 annual meeting of the physics society of Republic of China (P1-OE-062)(PSROC2015) **Student Poster Award**
2. Ming-Syuan Chen, Chun-Yu Hsu, Jing-Yi Wang, Yi-Hsin Lin, “THE STUDY OF INTERFACIAL INTERACTION BETWEEN LIQUID CRYSTAL MOLECULES AND HIGH-DENSITY LIPOPROTEIN” 2015 annual meeting of the physics society of Republic of China (P1-SS-002)(PSROC2015) **Student Poster Award**
3. Michael Chen, Shih-Ya Ni, Po-Ju Chen, Hung-Shan Chen, Wen-Feng Hsieh,and Yi-Hsin Lin, “A study of surface influence on crystal growth of polymer-stabilized blue phase liquid crystals,” 2014 Annual Meeting of ROC TLCS (Poster PP-20).
4. Hung-Shan Chen, Yi-Hsin Lin, Chia-Ming Chang, Yu-Jen Wang, Abhishek Kumar Srivastava, Jia Tong Sun, and Vladimir Grigorievich Chigrinov, “A polarized bifocal switch based on liquid crystals operated electrically and optically, ” 2014 Annual Meeting of ROC TLCS (Poster PP-24).
5. Li-Lun Hu, Ming-Syuan Chen, and Yi-Hsin Lin, “Mechanical tunable achromatic phase retarder using the LC cells,” 2014 Annual Meeting of ROC TLCS (Poster PP-25).
6. Hung-Shan Chen, Yi-Hsin Lin, Abhishek Kumar Srivastava, Vladimir Grigorievich Chigrinov, Chia-Ming Chang, and Yu-Jen Wang, “A large bistable negative lens by integrating a polarization switch with a passively anisotropic focusing element, ” 2014 Annual Meeting of ROC TLCS (Poster PP-28). **Student Poster Award**
7. Yu-Shih Tsou, Kai-Han Chang , Kuei-Hung Chuang, and Yi-Hsin Lin "A droplet manipulation on a liquid crystal and polymer composite film as a concentrator and a sun tracker for a concentrating photovoltaic system" 2014 annual meeting of the physics society of Republic of China (PSROC2014) (P2-OE-184).

8. Ming-Syuan Chen, Neil Collings, Hung-Chun Lin, Li-Lun Hu, and Yi-Hsin Lin "A holographic projection system with an electrically tunable optical zoom and a fixed location of zero-order diffraction" 2014 annual meeting of the physics society of Republic of China (PSROC2014) (Poster P2-OE-189).
9. Michael Chen, Chyong-Hua Chen, Yin-Chieh Lai, and Prof. Yi-Hsin Lin "An electrically tunable liquid crystal lens for fiber coupling and variable optical attenuation" 2014 annual meeting of the physics society of Republic of China (PSROC2014) (Poster P2-OE-192).
10. Michael Chen, Hung-Shan Chen, Hung-Yuan Chen, and Prof. Yi-Hsin Lin "The study of crystal nucleation of polymer-stabilized blue phase liquid crystals" 2014 annual meeting of the physics society of Republic of China (PSROC2014) (Poster P2-OE-193).
11. Hung-Shan Chen, Ming-Syuan Chen, and Yi-Hsin, "An electrically tunable depth-of-field endoscope using a liquid crystal lens as an active focusing element" 2014 annual meeting of the physics society of Republic of China (PSROC2014) (Poster P2-OE-197). **Student Poster Award**
12. Hung-Shan Chen, Yu-Jen Wang, Chia-Ming Chang, and Yi-Hsin Lin, "Electrically tunable ophthalmic lenses for myopia and presbyopia using liquid crystals" 2014 annual meeting of the physics society of Republic of China (PSROC2014) (Poster P2-OE-198).
13. Kai-Han Chang, Wei-Lin Chu, Yu-Shih Tsou, Yi-Hsin Lin, Li-Ching Wu, and Chien-Feng Li, "An investigation of biosensing mechanism for high-density lipoprotein cholesterols on a liquid crystal and polymer composite film" 2013 annual meeting of the physics society of Republic of China (PSROC2013) (OE-P2-006). **Student Poster Award**
14. Shih-Ya Ni, Hung-Shan Chen, and Yi-Hsin Lin, "Electrically-induced-birefringence of Kerr effect in polymer-stabilized blue phase liquid crystals resulting from orientations of liquid crystals". 2013 annual meeting of the physics society of Republic of China (PSROC2013) (OE-P2-121). **Student Poster Award**
15. Kai-Han Chang, Ting-Yu Chu, Yu-Shih Tsou, Yi-Hsin Lin, and Ya-Ping Chiu, "An electrically switchable surface free energy on a liquid crystal and polymer composite film," 2012 Annual Meeting of ROC TLCS (Poster PP-18). **Student Poster Award**
16. Yi-Hsin Lin, Hung-Shan Chen, Chun-Hung Wu, and Hsu-Kuan Hsu, "Measuring electric-field-induced birefringence in polymer stabilized blue phase liquid crystal based on phase shift measurement", International Photonics Conference 2011 (Poster PG-TH-06).
17. Yi-Hsin Lin, Ming-Syuan Chen, and Hung-Chun Lin, "An electrically tunable optical zoom system using two composite liquid crystal lenses with a lqrge zoom ratio", International Photonics Conference 2011 (Poster PE-TH-16).
18. Yu-Shih Tsou and Yi-Hsin Lin, "A polarization independent liquid crystal phase modulation adopting surface pinning effect of polymer dispersed liquid crystals", 2011 Annual Meeting of ROC TLCS (Poster PP-32).
19. Ming-Syuan Chen, Hung-Chun Lin, Hsin-Ju Su and Yi-Hsin Lin, "An Electrically Tunable Optical Zooming System using Two Liquid Crystal Lenses", 2011 Annual Meeting of ROC TLCS (Poster PP-33).
20. Hung-Shan Chen, Chun-Hung Wu, Hung-Yuan Chen, Shih-Ya Ni, Yu-Chieh Su, Hsu-Kuan Hsu, and Yi-Hsin Lin, "Measuring electric-field-induced birefringence in polymer stabilized blue phase liquid crystal based on phase shift measurement", 2011 Annual Meeting of ROC TLCS (Poster PP-34).

21. Ting-Yu Chu, Wei-Lin Chu, Wen-Rou Chen, and Yi-Hsin Lin, "The Droplet Motion on a Liquid Crystal and Polymer Composite Film", 2011 annual meeting of the physics society of Republic of China (PSROC2011) (Poster EP-178)
22. Hung-Chun Lin, Ming-Syuan Chen , and Yi-Hsin Lin, "An electrically tunable-focusing imaging system based on switching of two modes of a liquid crystal lens", 2011 annual meeting of the physics society of Republic of China (PSROC2011) (Poster EP-172)
23. Tsung-Han Chiang, Hung-Shan Chen, Chun-Hung Wu, Hung-Yuan Chen, Hsu-Kuan Hsu, and Yi-Hsin Lin, "A reflective polarizer-free electro-optical switch using dye-doped polymer-stabilized blue phase liquid crystals", 2011 annual meeting of the physics society of Republic of China (PSROC2011) (Poster EP-170)
24. Chun-Hung Wu, Hung-Shan Chen, Tsung-Han Chiang, Hung-Yuan Chen and Yi-Hsin Lin, "Measurement of the Electric Field-induced Birefringence and Kerr constant for an Optical Isotropic Kerr Medium", 2011 annual meeting of the physics society of Republic of China (PSROC2011) (Poster EP-168)
25. Yu-Shih Tsou, Shih-Ya Ni, and Yi-Hsin Lin, "A control of light uniformity for concentrator photovoltaic using an electrically tunable liquid crystal phase modulator", 2011 annual meeting of the physics society of Republic of China (PSROC2011) (Poster EP-138)
26. Ming-Syuan Chen, Hung-Chun Lin, Hsin-Ju Su and Yi-Hsin Lin, ”An Electrically Tunable Optical Zooming System using Two Liquid Crystal Lenses” , 2011 annual meeting of the physics society of Republic of China (PSROC2011) (Poster EP-182)
27. T. Y. Chu, W. L. Chu, W. R. Chen, and Y. H. Lin, "The droplet motion on a liquid crystal and polymer composite film", 2010 Annual Meeting of ROC TLCS (Poster PP43) (p.184-187).
28. T. H. Chiang, H. S. Chen, C. H. Wu, H. Y. Chen, H. K. Hsu, and Y. H. Lin, "A reflective polarizer-free display using dye-doped polymer-stabilized blue phase liquid crystals", 2010 Annual Meeting of ROC TLCS (Poster PP-33) (p.153-156).
29. H. C. Lin, M. S. Chen, and Y. H. Lin, "A fast response and large electrically tunable-focusing imaging system based on switching of two modes of a liquid crystal lens", 2010 Annual Meeting of ROC TLCS (Poster PP-08) (p.68-71).
30. Yu-Shih Tsou, Ting-Yu Chu, Jun-Lin Chen, Wei-Lin Chu, Yu-Chih Huang, Hsu-Kuan Hsu, Wang-Yang Li and Yi-Hsin Lin,“A Reflective Polarizer-free,Color-filter-free, and Bistable Display Using a Droplet Manipulation on a Liquid Crystal and Polymer Composite Film”2010 Taiwan Display Conference (TDC2010) (Poster)D-032 **Student Poster Award**
31. Hung-Chun Lin, Yi-Hsin Lin, “An Electrically Tunable Focusing Pico Projector” 2010 Taiwan Display Conference (TDC2010) (Poster)D-033
32. Hung-Shan Chen, Hung-Chun Lin, Yu-Shih Tsou, and Tsung-Han Chiang, Chun-Hung Wu, Hsu-Kuan Hsu, Wang-Yang Li and Yi-Hsin Lin, “Polarizer-free and fast response microlens arrays using polymer-stabilized blue phase liquid crystals.” 2010 Taiwan Display Conference (TDC2010) (Poster)D-054
33. Hung-Shan Chen, Tsung-Han Chiang, Chun-Hung Wu, and Yi-Hsin Lin, “Electrically tunable polarizer-free phase modulation and amplitude modulation using polymer-stabilized blue phase liquid crystals” 2010 annual meeting of the physics society of Republic of China (PSROC2010) (Poster) EP-137
34. Ting-Yu Chu, Yu-Shih Tsou, Wei-Lin Chu, Jun-Lin Chen, Yu-Chih Huang, Yi-Hsin Lin, Farn Lu, and Wan Chen Tsai, “Human Semen Sensing Using an Electrically Tunable Wettability of Liquid Crystal and Polymer Composite Film” 2010 annual meeting of the

physics society of Republic of China (PSROC2010) (Poster) EP-138 **Student Poster Award**

35. Jun-Lin Chen, Yu-Shih Tsou, Ting-Yu Chu, Wei-Lin Chu, Yu-Chih Huang, and Yi-Hsin Lin, "The Effect of Pulsed Voltages for a Polarizer-free Bistable Display Using a Droplet Manipulation on a Liquid Crystal and Polymer Composite Film" 2010 annual meeting of the physics society of Republic of China (PSROC2010) (Poster) EP-129
36. Hung-Chun Lin, Chih-Wei Lai, Yu-Shih Tsou, Wei-Hung Tsay, and Yi-Hsin Lin, "An Electrically Tunable Focusing Pico Projector Using a Liquid Crystal Lens" 2010 annual meeting of the physics society of Republic of China (PSROC2010) (Poster) EP-117
37. Ting-Yu Chu, Yu-Shih Tsou, Jun-Lin Chen, Wei-Lin Chu, Yu-Chih Huang, *Hsu-Kuan Hsu, *Wang-Yang Li and Yi-Hsin Lin, "A Reflective Polarizer-free Bistable Display Using a Droplet Manipulation on a Liquid Crystal and Polymer Composite Film" , 2009 Annual Meeting of ROC TLCS (Dec 18, 2009 in Hsinchu, Taiwan) (Poster)(pp-15) **Student Poster Award**
38. Hung-Shan Chen, Tsung-Han Chiang, Chun-Hung Wu, Hung-Chun Lin, *Hsu-Kuan Hsu, *Wang-Yang Li and Yi-Hsin Lin, "Polarization independent and fast response phase modulations using polymer-stabilized blue phase liquid crystals.", 2009 Annual Meeting of ROC TLCS (Dec 18, 2009 in Hsinchu, Taiwan) (Poster)(pp-34)
39. Jiong-Kuan Lee, Hung-Chun Lin, Ting-Yu Chu and Yi-Hsin Lin, "An Electrically Tunable Liquid Lens Using a Liquid Crystal/Polymer Composite Film", 2009 annual meeting of the physics society of Republic of China (PSROC2009) (Poster) **Student Poster Award**
40. Ching-Hua Hung, Yi-Hsin Lin, Po-Tsung Lee, Hui-Lung Kuo and Yu-Chen Lin "Surface alignment properties of nematic liquid crystals using a nanoimprint technology" 2009 annual meeting of the physics society of Republic of China (PSROC2009) (Poster)
41. Yu-Shih Tsou, Wei-Chih Lin, Chia-Hao Kuo, Chyong-Hua Chen, Yi-Hsin Lin "Polarization-independent Phase Modulation Using a Polymer-dispersed Liquid Crystal in a 90 Degree Twisted Cell", 2009 annual meeting of the physics society of Republic of China (PSROC2009) (Poster)
42. Chun-Hsiang Lo, Jhih-Ming Yang, Hung-Shan Chen, and Yi-Hsin Lin, "The Optical Analysis of a Polarizer-free Three-step Switch Using Gradient Dye-doped Liquid Crystal Gels", 2009 annual meeting of the physics society of Republic of China (PSROC2009) (Poster)
43. Hung-Chun Lin, Jy-Shan Hsu, Yi-Hsin Lin, and Kei-Hsiung Yang, "Thermal Amplification of Light Leakage in In-plane Switching Liquid Crystal Displays", 2008 Annual Meeting of ROC TLCS (Poster PP-21) (p.110-113) **Student Poster Award**
44. Hung-Chun Lin, Yi-Hsin Lin, Hongwen Ren, Young-Hsun Wu, Shin-Tson Wu, Yue Zhao, and Jiyu Fang, "Electrically tunable wettability of liquid crystal/polymer composite films", 2008 Annual Meeting of ROC TLCS (Poster PP-22) (p.114-117)
45. Yu-Shih Tsou, Wei-Chih Lin, Chia-Hao Kuo, Chyong-Hua Chen, Yi-Hsin Lin "Polarization-independent Phase Modulation Using a Polymer-dispersed Liquid Crystal in a 90 Degree Twisted Cell", 2008 Annual Meeting of ROC TLCS (Poster PP-29) (p.141-144)
46. Jiong-Kuan Lee, Hung-Chun Lin, Ting-Yu Chu and Yi-Hsin Lin, "An Electrically Tunable Liquid Lens Using a Liquid Crystal/Polymer Composite Film", 2008 Annual Meeting of ROC TLCS (Poster PP-38) (p.173-175)
47. Chun-Hsiang Lo, Jhih-Ming Yang, Hung-Shan Chen, Yi-Hsin Lin, Yan-Rung Lin, Shie-Chang Jeng, and Chi-Chang Liao, "Polarizer-free Three-step Switch Gradient

Dye-doped Liquid Crystal Gels", 2008 Annual Meeting of ROC TLCS (Poster PP-36) (p.165-168)

48. Ching-Hua Hung, Yi-Hsin Lin, Po-Tsung Lee, Hui-Lung Kuo, and Yi-Ying Lai, "The Study of an Electrically Tunable Liquid Crystal-polymer Phase Grating Using a Nano-imprinting Method" 2008 Annual Meeting of ROC TLCS, (Poster PP-37) (p.169-172)
49. Jiong-Kuan Lee, Hung-Chun Lin, Ting-Yu Chu and Yi-Hsin Lin, "An Electrically Tunable Liquid Lens Using a Liquid Crystal/Polymer Composite Film", 2008 International Conference on Optics and Photonics in Taiwan (Oral presentation) (p.87)
50. Hung-Chun Lin, Yi-Hsin Lin, Jy-Shan Hsu, and Kei-Hsiung Yang, "Thermal Amplification of Light Leakage in In-plane Switching Liquid Crystal Displays", 2008 International Conference on Optics and Photonics in Taiwan (Oral Presentation) (p.87)
51. Chun-Hsiang Lo, Jhih-Ming Yang, Hung-Shan Chen, Yi-Hsin Lin, Yan-Rung Lin, Shie-Chang Jeng, and Chi-Chang Liao, "Polarizer-free Three-step Switch Gradient Dye-doped Liquid Crystal Gels", 2008 International Conference on Optics and Photonics in Taiwan (Oral Presentation) (p.87)
52. Ching-Hua Hung, Yi-Hsin Lin, Po-Tsung Lee, Hui-Lung Kuo, and Yi-Ying Lai "An Electrically Tunable Liquid Crystal-polymer Phase Grating Using a Nano-imprinting Method", 2008 International Conference on Optics and Photonics in Taiwan (Poster Fri-P1-136) (p.114) **Student Poster Award**
53. H. J. Lin, Y. H. Lin, "The study of electrically tunable surface properties of a liquid crystal/polymer composite film", 2008 annual meeting of the physics society of republic of china (PSROC2008) (Poster)
54. J. M. Yang, Y. H. Lin, Y. R. Lin, S. C. Jeng, and C. C. Liao, "The optical analysis of polarizer-free flexible displays using dye-doped liquid crystal gels", 2008 annual meeting of the physics society of republic of china (PSROC2008) (Poster) **Student Poster Award**
55. J. M. Yang, Y. H. Lin, Y. R. Lin, S. C. Jeng, and C. C. Liao, "The study of polarizerfree-flexible displays using dye-doped liquid crystal gels", Optics and Photonics, Taiwan 2007. (Oral presentation)
56. W. C. Lin, Y. H. Lin, "The phase shift study of polarizer-free liquid crystal phase modulation ", Optics and Photonics, Taiwan 2007. (Poster)**Student Poster Award**
57. J. M Yang, Y. H. Lin, Y. R. Lin, W. C. Lin, S. C. Jeng, and C. C. Liao, "Polarizer-free Reflective and Flexible Liquid Crystal Displays Using Dye-doped Liquid Crystal Gels", ISFED 2007. (Oral presentation)
58. Y. H. Lin, H. Ren, Y. H. Wu, and S. T. Wu, "General principles of polarization independent liquid crystal phase modulations", Optics and Photonics, Taiwan 2006, EO10. (Oral presentation)
59. J. M Yang, Y. S. Tzou, and Y. H. Lin, "Simulation of a tunable focus cylindrical liquid crystal lens using two anisotropic polymer films and two slit electrodes", Optics and Photonics, Taiwan 2006, EP022. (Poster)
60. Y. H. Lin, H. W Ren, Y. H. Wu, Xiao Liang and S. T. Wu, "Polarization independent liquid crystal devices", (**Invited Talk**) ROC Taiwan Liquid Crystal Society annual meeting (Dec. 30, 2005)
61. T. J. Chen, Y. H. Lin and S. H. Chen, "Temperature sensor employing liquid-crystal-clad fiber as a modal filter"; Proceeding of Optics and Photonics Taiwan'01, P.1044-1045 (2001).
62. T. J. Chen, Y. H. Lin and S. H. Chen , "Use of liquid-crystal-clad fiber in dual-mode fiber sensor"; Proceeding of Optics and Photonics Taiwan'99, P. 683-686 (1999).

Patents

LC LENS	
1	林怡欣;徐旭寬;陳政嶸;”相位調變元件、可切換２Ｄ／３Ｄ的顯示裝置、微透鏡陣列、３Ｄ顯示裝置與背光模組”, 專利號：I442132, 公告日：2014/06/21, 申請號：0099130566, 申請日：2010/09/09(中華民國專利)
2	林怡欣;林弘峻; “液晶透鏡結構及其驅動方法”, 專利號：I407221, 公告日：2013/09/01, 申請號：0099142532, 申請日：2010/12/07(中華民國專利)
3	Lin Yi-Hsin;Lin Hung-Chun; “Liquid crystal lens structure and method of driving same”,專利號：08330933, 公告日：2012/12/11, 申請號：13096443, 申請日：2011/04/28(美國專利)
4	林 怡欣;林 弘峻; “液晶レンズ構造とその駆動方法”, 專利號：5533780, 公告日：2014/05/09, 申請號：2011107054, 申請日：2011/05/12(日本專利)
5	陳宏山;林怡欣;“液晶聚合物透鏡結構”, 公開號：201432347, 公開日：2014/08/16, 申請號：0102104728, 申請日：2013/02/07(中華民國專利申請中)
6	陳宏山;林怡欣; “液晶透鏡結構及其電控液晶眼鏡結構”, 公開號：201403178, 公開日：2014/01/16, 申請號：0101125012, 申請日：2012/07/11(中華民國專利申請中)
7	Chen Hung-Shan; Lin Yi-Hsin; “LIQUID CRYSTALLINE POLYMER LENS STRUCTURE”, 公開號：20140218674, 公開日：2014/08/07, 申請號：13828723, 申請日：2013/03/14(美國專利申請中)
8	Chen Hung-Shan; LIN Yi-Hsin; ”LIQUID CRYSTAL LENS STRUCTURE AND ELECTRICAL CONTROLLING LIQUID CRYSTAL GLASSES STRUCTURE THEREOF”,公開號：20140016080, 公開日：2014/01/16, 申請號：13644836, 申請日：2012/10/04(美國專利申請中)
9	Lin Yi-Hsin;Lin Hung-Chun; “PROJECTION APPARATUS”, 公開號：20120147342, 公開日：2012/06/14, 申請號：12967067, 申請日：2010/12/14(美國專利申請中)
10	林怡欣;林弘峻; ”液晶透镜结构及其驱动方法”,公開號：CN102566191, 公開日：2012/07/11, 申請號：201110035015.8, 申請日：2011/02/09(中國專利申請中)
11	韦安琪;林怡欣; ”太阳能发电装置及太阳能发电模块及温度调整方法”, 公開號：CN102281015, 公開日：20111214, 申請號：201010195876.8, 申請日：20100609(中國專利申請中)
12	韋安琪;林怡欣;”太陽能發電裝置及太陽能發電模組及溫度調整方法”, 公開號：201145528, 公開日：2011/12/16, 申請號：0099117526, 申請日：

	2010/06/01(中華民國專利申請中)
LCPCF	
1	林怡欣;朱為麟;吳麗卿; ”生物檢測裝置及檢測方法”, 專利號：I456199,公告日：2014/10/11, 申請號：0100149671, 申請日：2011/12/29 (中華民國專利)
2	林怡欣;”具有液晶聚合物薄膜之檢測裝置及檢測方法”,專利號：I453410, 公告日: 2014/09/21, 申請號：0099124815, 申請日：2010/07/27(中華民國專利)
3	林怡欣;徐旭寬; ”水濕性可調薄膜及顯示裝置”, 專利號：I427320, 公告日：2014/02/21, 申請號：0098108621, 申請日：2009/03/17(中華民國專利)
4	Lin Yi-Hsin; Chu Wei-Lin; Wu Li-Ching; “BIOLOGICAL DETECTION DEVICE AND DETECTING METHOD”, 公開號：20130167621, 公開日：2013/07/04, 申請號：13595648, 申請日：2012/08/27(美國專利申請中)
BPLC	
1	林怡欣;陳宏山;徐旭寬; ”液晶混合物、液晶顯示器及其操作方法”, 專利號：I412824, 公告日：2013/10/21,申請號：0099128031, 申請日：2010/08/20(中華民國專利)
2	陳宏山;吳俊宏;林怡欣;徐旭寬;”藍相液晶及其製造方法”, 公開號：201314296, 公開日：2013/04/01, 申請號：0100135497, 申請日：2011/09/30(中華民國專利申請中)
3	Chen Hung-Shan; Wu Chun-Hung; Lin Yi-Hsin; Hsu Hsu-Kuan;”BLUE PHASE LIQUID CRYSTAL AND MANUFACTURING METHOD THEREOF”, 公開號：20130083283, 公開日：2013/04/04, 申請號：13449703, 申請日：2012/04/18(美國專利申請中)
4	陈宏山;吴俊宏;林怡欣;徐旭宽; ”蓝相液晶及其制造方法”, 公開號：CN103031131(B), 公開日：2014/12/10, 申請號：201110297246.6, 申請日：2011/09/30(中國專利申請中)
5	陈宏山;吴俊宏;林怡欣;徐旭宽; “蓝相液晶及其制造方法”公開號：CN103031131(A), 公開日：2013/04/10, 申請號：201110297246.6, 申請日：2011/09/30(中國專利申請中)
6	陳 宏山;呉 俊宏;林 怡欣;徐 旭寛; “ブルー相液晶及びその製造方法”, 公開號：2013080198, 公開日：2013/05/02, 申請號：2012089026,申請日：2012/04/10(日本專利申請中)
Others	
1	林怡欣;林雁容;廖奇璋;鄭協昌;”多區域光電開關裝置”, 專利號：I383202, 公告日：2013/01/21, 申請號：0097118493, 申請日：2008/05/20(中華民

	國專利)
2	Hsieh Pao-Ju;Lin Yi-Hsin;Ren Hongwen;Wu Shin-Tson, “Polymer dispersed liquid crystal device conditioned with a predetermined anchoring energy, a predetermined polymer concentration by weight percent and a predetermined cell gap to enhance phase separation and to make smaller and more uniform liquid crystal droplets”專利號：07499124, 公告日：2009/03/03, 申請號：11122008, 申請日：2005/05/05(美國專利)
4	姚柏宏;張延瑜;林怡欣;楊文勛;“光學被動元件以及光源模組”,公開號：200844543, 公開日：20081116, 申請號：0096115829, 申請日：20070504(中華民國專利申請中)
5	Yao Po-Hung; Chang Yem-Yeu; Lin Yi-Hsin; Yang Wen-Hsun; ”PASSIVE OPTICAL DEVICE AND LIGHT SOURCE MODULE”公開號：20080273143, 公開日：2008/11/06, 申請號：11852335, 申請日：2007/09/10(美國專利申請中)
8	姚柏宏;张延瑜;林怡欣;杨文勛; “光学无源元件以及光源模块”, 公開號：CN101315480, 公開日：2008/12/03, 申請號：200710106505.6, 申請日：2007/06/01(中國專利申請中)