

# Publication List

## Journal Papers

1. Ko-Wei Chien and Han-Ping D. Shieh, “*Design and Fabrication of an Integrated Polarized Lightguide for Liquid-crystal-display Illumination*”. *Applied Optics*, Vol. 43, No. 9, pp. 1830-1834 (2004).
2. Ko-Wei Chien, Han-Ping D. Shieh and Hugo Cornelissen, “*Polarized Backlight Based on Selective Total Internal Reflection at Microgrooves*”. *Applied Optics*, Vol. 43, No. 24, pp. 4672-4676 (2004).
3. Ko-Wei Chien, Han-Ping D. Shieh and Hugo Cornelissen, “*Efficient Polarized Backlight for Transflective LCD Illumination*”. *Journal of Japanese Appl. Physics*, Vol. 44, No. 4A, pp. 1818-1819 (2005).
4. Han-Ping D. Shieh, Yi-Pai Huang, and Ko-Wei Chien, “*Micro-Optics for Liquid Crystal Displays Applications*”. *Journal of Display Technology Accepted*. (2005)
5. Ko-Wei Chien and Han-Ping D. Shieh, “*Tim-multiplexed 3D Display Based on Directional Backlight with Fast Switching Liquid Crystal*”. *Applied Optics Accepted*. (2005)

## International Conference Papers

1. Jun-Jay Wang, Ko-Wei Chien and Han-Ping D. Shieh, “*Micro-lens-Array on Transflective Displays for Light Efficiency Enhancement*”, *International Display Manufacturing Conference 2005 (IDMC’05)*, pp.357~359.
2. Yu-Mioun Chu, Ko-Wei Chien and Han-Ping D. Shieh, “*3D Mobile Display Based on Dual Directional Lightguides*”, *International Display Manufacturing Conference 2005 (IDMC’05)*, pp.799~801.
3. Ko-Wei Chien and Han-Ping D. Shieh, “*3D Mobile Display Based on Sequentially Switching Backlight with Focusing Foil*” *Society for Information Display 2004 (SID’04)*, pp.1434~1437.
4. (Invited Paper) H. J. Cornelissen, H. J. B. Jaqt, D. J. Broer, C. W. M. Bastiaansen, and Ko-Wei Chien, “*Efficient Polarized-light Backlights*”, *International Display Workshops 2004 (IDW’04)*.
5. Ko-Wei Chien, Shu-Jia Shiu and Han-Ping D. Shieh, “*Design and Fabrication of an Integrated Polarized Lightguide*”, *International Display Manufacturing Conference 2003 (IDMC’03)*, pp.223~225.
6. Ko-Wei Chien and Han-Ping D. Shieh, “*An Integrated Lightguide Equipped with Polarization Conversion*” *Society for Information Display 2002 (SID’02)*, pp.1229~1231.
7. Yi-Pai Huang, Ko-Wei Chien, Yeh-En Chien, and Han-Ping David Shieh, “*High*

*Brightness Reflective Color STN-LCD Using a Multi-directional Asymmetrical Microlens Array Light Control Film*". *Advanced Manufacturing Technologies and Education 2002 (AMTE'02)*, p. 213.

8. **Ko-Wei Chien** and Han-Ping D. Shieh, "An Integrated Lightguide Equipped with Polarization Conversion", *International Topics Meeting on Optics in Computing 2002 (OC 2002)*

9. **Ko-Wei Chien**, Ching-Yu Tsai and Han-Ping D. Shieh, "Analyses and Suppression of Moire patterns of LCD Rear Projection Screens", *Society for Information Display 2001 (SID'01)*, pp.938~942.

10. **Ko-Wei Chien**, Keng-Han Chuang, Chi-Feng Chen and Han-Ping D. Shieh, "Establishment of Illumination Systems and Evaluation of Uniformity on LC Panel", *International Photonics Conference 2000 (IPC'00)*, pp. 885~887.

## **Domestic Conference Paper**

1. Yu-Mioun Chu, **Ko-Wei Chien** and Han-Ping D. Shieh, "Autostereoscopic Displays Based on Directional Backlight with Fast Switching LC", *Taiwan Display Conference 2004 (TDC'04)*, pp.213~216.

2. Jun-Jay Wang, **Ko-Wei Chien** and Han-Ping D. Shieh, "Efficient, Uniform, Mixed White Light LEDs for LCD TV Backlight Illumination" *Taiwan Display Conference 2004 (TDC'04)*, pp.229~231.

3. **Ko-Wei Chien**, Han-Ping D. Shieh and Hugo Cornelissen, "3D Mobile Display Based on Directional Backlight with Fast Switching LCD", *Optics and Photonics Taiwan 2003 (OPT'03)*, pp.525~527.

4. Sheng-Lung Wu, **Ko-Wei Chien** and Han-Ping D. Shieh, "Application of the Sub-wavelength Grating on Liquid Crystal Display Illumination", *Optics and Photonics Taiwan 2003 (OPT'03)*, pp. 251~253.

5. (Best student paper) **Ko-Wei Chien** and Han-Ping D. Shieh, "Fabrication of an Integrated Polarized Lightguide", *Optics and Photonics Taiwan 2002 (OPT'02)*, pp. 272~274.

6. (Best student paper) **Ko-Wei Chien** and Han-Ping D. Shieh, "An Integrated Lightguide Equipped with Polarization Conversion", *Optics and Photonics Taiwan 2001 (OPT'01)*

## Patents

### Granted:

1. 簡克偉, 謝漢萍, 王文魁, 吳金榮, 曾昭隆 “內建光源之影像感應積體電路裝置”, 中華民國專利發明第185311號, 民國92年8月.
2. 簡克偉, 謝漢萍, “具偏光轉換功能的導光板”, 中華民國專利發明第200029號, 民國93年4月.

### Pending:

1. 簡克偉, 謝漢萍, 朱玉棉, 張志明, 胡至仁, 陳伯倫, “立體影像成像系統及方法”, (美國&中華民國專利申請中)
2. 簡克偉, 謝漢萍, 王俊傑, 游如淵, 葉建良, 李宗懷, “可調色溫之照明系統”, (美國&中華民國專利申請中)
3. 簡克偉, 謝漢萍, 朱玉棉, 張志明, 胡至仁, 楊青桑, 許益誠, 陳伯倫, “背光模組及利用此背光模組之立體影像成像裝置和方法”, (美國&中華民國專利申請中)

## Other Publications



1. Ko-Wei Chien, “3D mobile display based on sequentially switching backlight with focusing foil”, **Display Device, Winter issues (2004)**
2. Sunny Bains, “Backlighting Scheme May Improve Efficiency”, **Laser Focus World, June (2004)**
3. 簡克偉, 謝漢萍, “下一世代顯示技術-立體影像顯示器之發展近況”. **電工通訊季刊**第三季 2004 年九月號.pp.38~43.
4. 簡克偉, 蔡晴宇, 張宗閔, 謝漢萍, “對LCD背投影屏幕上莫瑞條紋的分析與抑制”. **現代顯示雜誌**第 30 期(2001 年第四期). pp.19~22.

## Awards

- 2002 - 教育部九十年度「機電設計與整合」專題製作競賽全國第二名
- 2002 - 台灣光電科技研討會 (OPT' 02) 最佳學生論文獎
- 2001 - 光電工業教學資源中心90年度專題實作競賽第一名
- 2001 - 台灣光電科技研討會 (OPT' 01) 最佳學生論文獎