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論文題目：改善低溫複晶矽薄膜電晶體均勻性之元件結構與

校正電路之研究

Study on the Uniformity Improvement of Low-Temperature
Polycrystalline-Silicon Thin Film Transistors with the Device
Structures and Compensated Circuits

Publication Lists

International Letter:

- [1] **Bo-Ting Chen**, Chang-Ho Tseng, Huang-Chung Cheng, Chi-Wei Chao, Ting-Kuo Chang, Jian-Hao Lu, and Albert Chin, "Symmetric gate-overlapped LDD poly-Si TFTs with selective and isotropic deposited Ni sub-gate," *IEEE/ECS Electrochemical and Solid-State Lett.*, vol. 7, pp. G37-G39, 2004.
- [2] Ting-Kuo Chang, Ching-Wei Lin, Chun-Chien Tsai, Jian-Hao Lu, **Bo-Ting Chen** and Huang-Chung Cheng, "High-performance poly-Si thin film transistors crystallized by excimer laser irradiation with a-Si spacer structure," in *IEEE/ECS Electrochemical and solid-state Lett.*, vol. 8, pp. G14-G16, 2005.
- [3] Ya-Hsiang Tai, Cheng-Chiu Pai, **Bo-Ting Chen**, and Huang-Chung Cheng, "A Source-Follower Type Analogue Buffer Using Poly-Si TFTs with Large Design Windows", *IEEE Electron Device Lett.*, vol. 26, pp. 811-813, 2005.

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- [1] Ya-Hsiang Tai, **Bo-Ting Chen**, Yu-Ju Kuo, Chun-Chien Tsai, Ko-Yu Chiang, Ying-Jyun Wei, and Huang-Chung Cheng, "A New Pixel Circuit for Driving Organic Light Emitting Diode with Low Temperature Polycrystalline Silicon Thin Film Transistors", *IEEE/OSA Journal of Display Technology*, vol. 1, pp. 100-104, 2005.
- [2] **Bo-Ting Chen**, Ya-Hsiang Tai, Yu-Ju Kuo, Chun-Chien Tsai, and

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- [4] **Bo-Ting Chen**, Ya-Hsiang Tai, Ying-Jyun Wei, Kai-Fang Wei, Chun-Chien Tsai, Chun-Yao Huang, Yu-Ju Kuo, and Huang-Chung Cheng, "Investigation of Source-Follower Type Analog Buffer Using Low Temperature Poly-Si TFTs", revised by *Solid State Electronics*.

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- [1] Ting-Kuo Chang, **Bo-Ting Chen**, Jian-Hao Lu, Fu-Tsun Chu, and Huang-Chung Cheng, "Excimer laser crystallization of a-Si_{1-x}Ge_x thin films and its applications to the low-temperature poly-Si_{1-x}Ge_x TFTs," in *Asia Society for Information Display Proc.*, p. 568-571, 2003.
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- [3] Huang-Chung Cheng, Ting-Kuo Chang, Chun-Chien Tsai, Jian-Hao Lu, and **Bo-Ting Chen**, "Fabrication of high-performance poly-Si thin film transistors by excimer laser irradiation with a-Si spacer structure," in *Taiwan Display Conference Proc.*, pp. 134-138, 2004.
- [4] Huang-Chung Cheng, Ching-Wei Lin, Ting-Kuo Chang, **Bo-Ting Chen**,

Chun- Chien Tsai, and Jian-Hao Lu “Low Temperature Poly-Si Thin Film Transistor”, *2003 International Electronic Devices and Material Symposia (2003IEDMS)*, I29-I36, 2003. (*Invited Paper*)

- [5] Ya-Hsiang Tai, **Bo-Ting Chen**, Yu-Ju Kuo, Ying-Jyun Wei, Cheng-Chiu Pai, Chun-Chien Tsai, and Huang-Chung Cheng, “New Analog Buffer Circuit Using Low Temperature Polycrystalline Thin Film Transistors for Active Matrix Displays”, in *International Display Manufacturing Conference (IDMC)* ,pp. 319-322, 2005 (*Oral*)
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- [7] Huang-Chung Cheng, Chun-Chien Tsai, Jian-Hao Lu, Ting-Kuo Chang, and **Bo-Ting Chen**, “Low Temperature Polycrystalline Silicon Thin Film Transistors Fabricated by Amorphous Silicon Spacer Structure with Pre-patterned TEOS Oxide Layer”, in *International Display Manufacturing Conference (IDMC)* ,pp. 52-54, 2005. (*Oral*)
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- [2] 鄭晃忠、常鼎國、蔡春乾、**陳柏廷**、呂健豪 “低溫複晶矽薄膜電晶體技術及其在平面顯示器上之應用”，科儀新知第二十五卷第二期，92.10
- [3] 戴亞翔、**陳柏廷**、鄭晃忠 “低溫複晶矽薄膜電晶體元件變異性及其在電路上之影響”，電子月刊第 121 期，2005 年八月號
- [4] **陳柏廷**、戴亞翔、郭育如、鄭晃忠 “主動式有機發光二極體畫素設計之簡介”，光電工程第 94 期，2006 年 6 月號

Patents:

- [1] 『薄膜電晶體之畫素校正電路』，中華民國專利，專利證號：I265474 號，公告日期：95 年 11 月 1 日
- [2] 『類比緩衝電路』，中華民國專利，申請中

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- [1] 九十四年度桃竹苗區專題競賽 B 組(碩士班與博士班研究生)第二名，

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