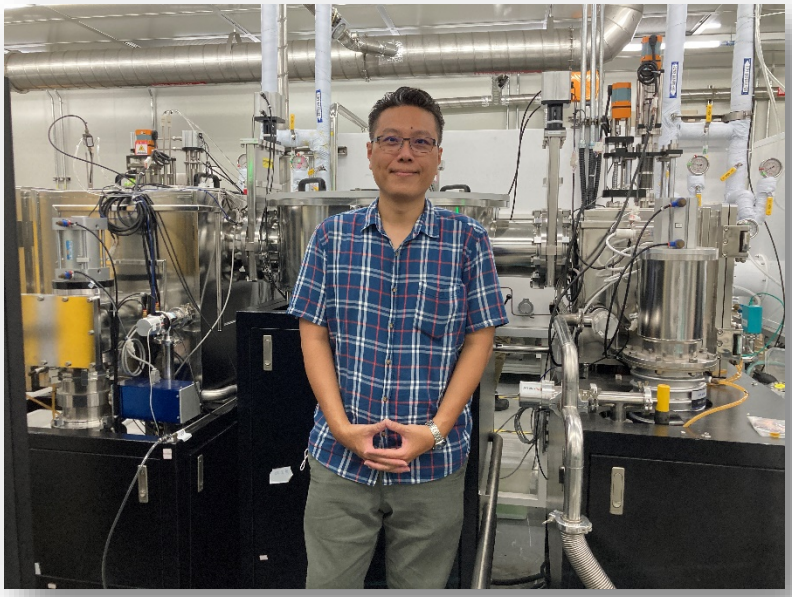
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C. National Technical Journal (國內技術期刊)
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E. Award (獲獎紀錄)
F. Academic services(學術服務)
G. Public Sector Evaluation Committee Member(政府機構及法人審查委員)
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18. 潘立成、**陳玉鴻** “化學氣相沉積系統環境距離差異導致影響抽氣效率分析與改善實驗”, **第 22 屆 2024 微電子技術發展與應用研討會論文集**, 31-35 頁, 5 月 2024. **(ISBN: 978-986-06557-9-7)**
19. 蔡書諾、**陳玉鴻** “自動焊線機換能器穩定度校正和分析”, **第 22 屆 2024 微電子技術發展與應用研討會論文集**, 36-40 頁, 5 月 2024. **(ISBN: 978-986-06557-9-7)**
20. 葉子揚、**陳玉鴻** “半導體晶圓窄雷射寬度切割最佳參數之研究”, **第 22 屆 2024 微電子技術發展與應用研討會論文集**, 26-30 頁, 5 月 2024. **(ISBN: 978-986-06557-9-7)**
21. 李柏陞、**陳玉鴻** “AI 影像辨識檢測方案：應用智慧製造半導體產線效能”, **第 22 屆 2024 微電子技術發展與應用研討會論文集**, 280-284 頁, 5 月 2024. **(ISBN: 978-986-06557-9-7)**
22. YONG-LIN XIE, YU-HENG XIA, ZHI-XIANG CHEN, CHI-DA YANG, **YU-HUNG CHEN** , “Effect of sputtering power and substrate temperature on the properties of copper oxide thin films prepared radio frequency magnetron sputtering technique”, the 21th Conference on Microelectronics Technology and Applications **(2023 微電子技術發展與應用研討會論文集)**, p.124-p.129, May/2023. **(ISBN: 978-986-06557-9-7)**
23. WAN CHUN LIN, YU JIE HSU, GUAN LIN SU, REN WEI JHENG, CHI-DA YANG, **YU-HUNG CHEN**, “Effect of elevated substrate temperature on the structural and optical properties of RF magnetron sputtered ZnO films”, the

21th Conference on Microelectronics Technology and Applications **(2023 微電子技術發展與應用研討會論文集)**, p.130-p.134, May/2023. **(ISBN: 978-986-06557-9-7)**

D. Invention Patent(專利發明)

(國外: 發明型專利/已獲證)

1. **Yu-Hung Chen**, Jun-Chin Liu, Chun-Heng Chen, " *Method for manufacturing P-I-N microcrystalline silicon structure for thin-film solar cells*", ***Patent No.: US 8,557,041 B1***, **United States Patent, Oct. 15, 2013. (美國)**
2. Jun-Chin Liu, **Yu-Hung Chen**, Chien-Liang Wu, Yu-Ru Chen, Yu-Ming Wang, "*Method of manufacturing thin film solar cells,*" ***Patent No.: US 8,772,071 B2***, **United States Patent, Jul. 8, 2014. (美國)**
3. Jun-Chin Liu, **Yu-Hung Chen**, Chien-Liang Wu, Yu-Ru Chen, Yu-Ming Wang, "*Manufacturing process of thin film solar energy batteries,*" ***Patent No.: 5589008***, **JAPAN Patent, Sep. 26, 2014. (日本)**
4. **Yu-Hung Chen**, Jun-Chin Liu, Yung-Tsung Liu, Chun-Heng Chen, "*HETERO-JUNCTION TYPE SOLAR BATTERY STRUCTURE,*" ***Patent No.: 5864660***, **JAPAN Patent, Feb. 17, 2016. (日本)**
5. **Yu-Hung Chen,** Jun-Chin Liu, Yung-Tsung Liu, Chun-Heng Chen, "HETERO-JUNCTION TYPE SOLAR BATTERY STRUCTURE," **Patent No.: 6066231, JAPAN Patent, Jan. 25, 2017. (日本)**
6. 刘俊岑, **陈玉鸿**, 吴建良, 陈毓儒, 王裕铭**, "**薄膜太阳能电池的制法**" , 中华人民共和国专利, 證書號： 201110379070.9), 公告/公開日: 2016/12/14 (中國大陸)**
7. 陈玉鸿**,** 刘俊岑, 刘永宗, 林宸澄, "异质结太阳电池(1)"**, 中华人民共和国专利, 證書號： 201310654869.3), 公告/公開日: 2017/11/21 (中國大陸)**
8. 陈玉鸿**,** 刘俊岑, 刘永宗, 林宸澄, "异质结太阳电池(2)"**, 中华人民共和国专利, 證書號： 201610659357), 公告/公開日: 2017/12/08 (中國大陸)**
9. Kuo-Wei Huang, Yung-Liang Tung, Shin-Hsiung Wu, Jen-An Chen, Pei-Ting Chiu, **Yu-Hung Chen**, "*Perovskite film and manufacturing method thereof*", ***Patent No.: US 11,271,157 B1***, **United States Patent, Mar. 8, 2022. (美國)**

(國內: 中華民國發明型專利/已獲證)

1. 黃國瑋,童永樑,吳世雄,陳壬安,邱培庭,**陳玉鴻**, "鈣鈦礦膜及其製造方法", 中華民國專利, 證書號： **I753551**, 公告/公開日: **2022/01/21**
2. **陳玉鴻,** 劉俊岑, 劉永宗, 林宸澈, "異質接面太陽電池結構", 中華民國專利, 證書號：**I469380**, 公告/公開日: **2015/1/11**

3. **陳玉鴻**, 劉俊岑, 陳俊亨, "一種薄膜太陽能電池之 P-I-N 微晶矽結構及其製法", 中華民國專利, 證書號：**I455343**, 公告/公開日: **2014/10/01**
4. 劉俊岑, **陳玉鴻**, 吳建良, 陳毓儒, 王裕銘, "薄膜太陽能電池之製法", 中華民國專利, 證書號：**I451580**, 公告/公開日: **2014/09/01**

E. Award (獲獎紀錄)

1. **2026** 年第二十四屆微電子技術發展與應用研討會半導體暨封裝組「**優等**」
2. **2026** 年國立高雄科技大學電機與資訊學院學生專題實務專題製作競賽電機電子組「**佳作**」
3. **2025** 年 113 學年度國立高雄科技大學「**績優實習輔導老師**」
4. **2025** 年第一屆鈣鈦礦校園創意競賽「**銅獎**」
5. **2025 年** 113 學年度國立高雄科技大學電機與資訊學院「**院級優良導師**」
6. **2025** 年國立高雄科技大學電機與資訊學院電機電子組實務專題競賽「**佳作**」
7. **2024** 年國立高雄科技大學電機與資訊學院電機電子組實務專題競賽「**優勝**」
8. **2022** 年台灣電子材料與元件協會(EDMA)「**傑出青年獎**」
9. **2022** 年再生能源與國家安全學術研討會「**論文競賽優選獎**」
10. **2022** 年 PV Award 太陽光電創新應用產品設計競賽「**入選獎**」
11. **2022** 年新竹縣產業總工會「**111 年度模範勞工**」
12. **2022** 年工研院院級第二屆 2030 跨域議題海選「**優勝**」
13. **2021** 年工研院綠能所創意發想「**點子計畫獎**」
14. **2021** 年工業技術研究院專利地圖分析與布局競賽「**冠軍**」
15. **2020** 年全球百大科技研發獎（**R&D 100 Awards**）
16. **2019** 年工業技術研究院 108 年全院級之「**傑出研究獎**」
17. **2016、2017、2018、2019** 年國立暨南國際大學「**教學評量獎(得分前10%課程)**」
18. **2013** 年世界名人錄（**Marquis Who'sWho in the World**）
19. **2012** 年內政部研發替代役制度「**100 年度績優研發替代役役男**」
20. **2008** 年國立中興大學工學院九十六學年度學生論文競賽「**優等獎**」
21. **2007** 年日月光公司之日月之光菁英論文獎「**佳作**」
22. **2005** 年台灣光電科技研討會「**學術壁報論文獎**」
23. **2005** 年中華民國斐陶斐榮譽學會「**榮譽會員**」

F. Academic services(學術服務)

1. 台灣半導體產業協會(Taiwan Semiconductor Industry Association, TSIA)產學委員會「產學校園大使」
2. 台灣電子材料與元件協會(The Electronics Devices and Materials Association, EDMA)，候補理事
3. 中國電機工程學會高雄市分會(The Chinese Institute of Electrical Engineering, CIEE.KH)，永久會員
4. 台灣電子材料與元件協會(The Electronics Devices and Materials Association ,EDMA)，永久會員
5. 台灣太陽能及新能源學會(Solar and New Energy Society of Taiwan, SNES/Taiwan)，永久會員
6. **特別議程主持人**，特別議程主題：Sensor Technologies and Semiconductor Devices, 2026 數位生活科技研討會 Symposium on Digital Life Technologies (DLT-2026), 嘉南藥理大學, 2026 年 5 月 22 日~5 月 23 日.
7. **SCIENTIFIC PROGRAM COMMITTEE**, 2026 International Conference on Physics and Mechanics of New Materials and Their Applications (PHENMA 2026), Busan, Korea, July 15-18, 2026.
8. **Scientific Program Committee,** Advanced Materials Development and Performance 2026 (AMDP 2026), Korea, July 15-18, 2026.
9. **SCIENTIFIC PROGRAM COMMITTEE**, 2025 International Conference on Physics and Mechanics of New Materials and Their Applications (PHENMA 2025), Kitakyushu, Japan, Sep. 27-30, 2025.
10. **Section chair**, Special section 4: Nano Semiconductor Materials, International Workshop on Consumer Electronics (2024 iWCE), Lunghwa university of science and technology, Taoyuan City, Taiwan, Nov. 22-23, 2024.
11. **Administration Co-chair / Local Organizing Committee**, International Electron Devices & Materials Symposium 2023 (IEDMS 2023), National Sun Yat-sen University, Taiwan, Oct. 18-19, 2023.
12. **SCIENTIFIC PROGRAM COMMITTEE**, 2023 International Conference on Physics and Mechanics of New Materials and Their Applications (PHENMA 2023), SURABAYA, INDONESIA, Oct. 03-08, 2023.
13. **Technical Program Member**, 2023 21st Conference on Microelectronics Technology and Application, National Kaohsiung University of Science and Technology, Taiwan, May 19, 2023.
14. **Technical Program Member and Session Chair**, International Electron Devices & Materials Symposium 2022 (IEDMS 2022), National Chi Nan University, Taiwan, Oct. 27-28, 2022.
15. **Technical Program Member**, Optics & Photonics Taiwan International

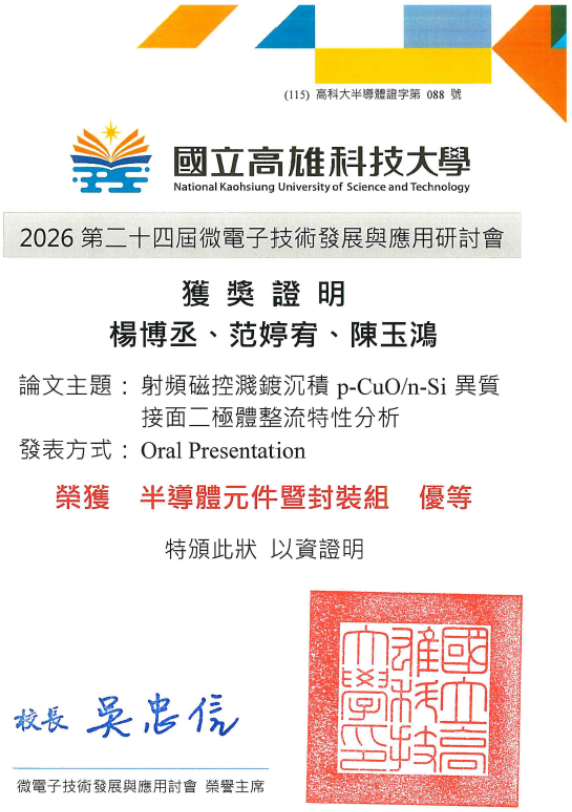
Conference 2019 (OPTIC 2019), Taiwan, National Chung Hsing University, Dec. 5-7, 2019.

G. Public Sector Evaluation Committee Member(政府機構及法人審查委員)

1. 經濟部技術司 115 年度創新前瞻計畫學界分包-審查委員
2. 經濟部產業發展署 115 年度「第八屆綠色工廠標章技術」-審查委員
3. 經濟部產業發展署 115 年度「協助傳統產業技術開發計畫(CITD)」-技術審查委員
4. 經濟部產業發展署 115 年度「邊緣智慧晶片暨跨域模組應用實務人才-通識能力認證專家委員會」-學術界委員
5. 教育部 115 年促進產學連結合作育才平台-學術界委員
6. 國立中山大學半導體聯合實驗室 115 年度-營運管理委員
7. 財團法人國防工業發展基金會列管軍品級別認證評鑑中心-評鑑委員
8. 國科會工程處 114 年產學計畫-審查委員

H. Student Awards(指導學生獲獎)

1. 指導學生楊博丞、范婷宥同學參加 2026 年第二十四屆微電子技術發展與應用研討會半導體暨封裝組【優等】



(115) 高科大半導體證字第 088 號

國立高雄科技大學
National Kaohsiung University of Science and Technology

2026 第二十四屆微電子技術發展與應用研討會

獲 獎 證 明

楊博丞、范婷宥、陳玉鴻

論文主題：射頻磁控濺鍍沉積 p-CuO/n-Si 異質接面二極體整流特性分析

發表方式：Oral Presentation

榮獲 半導體元件暨封裝組 優等

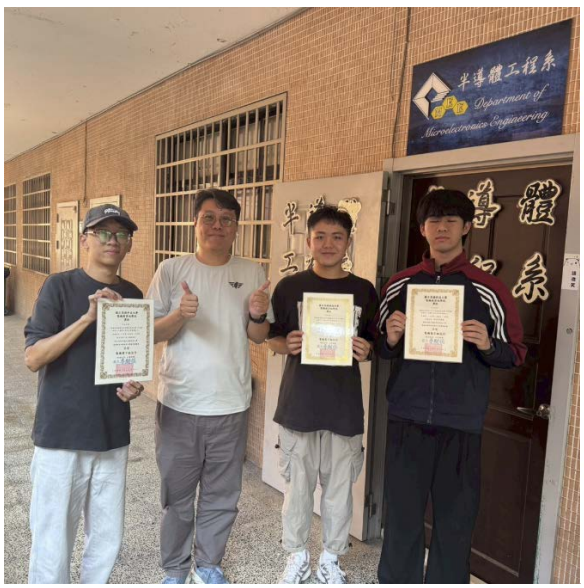
特頒此狀 以資證明

校長 吳忠信

微電子技術發展與應用討會 榮譽主席

中華民國 115 年 5 月 11 日

2. 指導學生江東潤、陳冠任、呂紹維同學參加 2026 年國立高雄科技大學電機與資訊學院學生專題實務專題製作競賽電機電子組榮獲【佳作】





國立高雄科技大學
電機與資訊學院
獎狀

作品名稱：

「藉磁控濺鍍薄 ZnO 保護層提昇金屬-半導體-金屬光二極體之紫外光電探測能力」

參賽學生：江東潤、陳冠任、呂紹維

指導老師：陳玉鴻副教授

參加 2026 年國立高雄科技大學
電機與資訊學院學生實務專題競賽

榮獲

電機電子組佳作

特頒此狀 以茲鼓勵

院長李財福

中華民國 115 年 6 月 18 日

3. 指導學生華葦蓁同學參加第一屆鈣鈦礦校園創意競賽榮獲【銅獎】





4. 指導學生馮鈺芯同學參加 114 年經濟部產業發展屬產學研工程人才實務能力卓越基地計畫實務專題成果發表會榮獲【卓越成果獎第一名】



5. 指導學生饒家銘同學參加 114 年經濟部產業發展屬產學研工程人才實務能力卓越基地計畫實務專題成果發表會榮獲【卓越成果獎第三名】



6. 指導學生楊庭安、陳勝安、陳冠宏同學獲得 The International Plasma Technology Joint Conference 2025 (IPTJC2025) ：【Honorable Mention Award】



獎 狀

CERTIFICATE OF ACHIEVEMENT

The International Plasma Technology Joint Conference 2025 (IPTJC2025)

Student Poster Competition Award

Honorable Mention

is awarded to

Ting-An Yang[1*], Shen-An Chen[1], Guan-Hong Chen[1], Chi-Da Yang[1], Yu-Hung Chen[1*]

Enhancing the photo-to-dark current ratio by inserting a thin ZnO layer in n-IGZO/p-Si metal–semiconductor–metal ultraviolet photodetectors

[1]Department of Microelectronics Engineering, National Kaohsiung University of Science and Technology, Kaohsiung City 811213, Taiwan

June 25-28 2025

明志科技大學 MING CHI UNIVERSITY OF TECHNOLOGY 校長 劉祖華

7. 指導學生楊庭安、陳勝安、陳冠宏同學參加 2025 年國立高雄科技大學電機與資訊學院學生實務專題製作競賽榮獲【電機電子組 佳作】



國立高雄科技大學
電機與資訊學院
獎狀

作品名稱：「利用嵌入氧化鋅薄披覆層提升氧化銦鎵鋅/矽金屬-半導體-金屬紫外線光檢測器之光暗電流比」

參賽學生：楊庭安、陳勝安、陳冠宏

指導老師：陳玉鴻助理教授、楊奇達教授

參加 2025 年國立高雄科技大學
電機與資訊學院學生實務專題製作競賽

榮獲

電機電子組佳作

特頒此狀 以茲鼓勵

院長李財福

中 華 民 國 114 年 6 月 20 日

8. 指導學生潘昭仁同學參加【2025 Symposium on Digital Life Technologies（數位生活科技研討會暨民生電子論壇）】榮獲【Best Poster Award】



2025 數位生活科技研討會
暨民生電子論壇
Symposium on Digital Life Technologies

最佳論文獎
Best Paper Award

鈣鈦礦奈米材料晶體尺寸對輻射放光強度的影響

潘昭仁、黃國瑋、胡智鈞、陳玉鴻

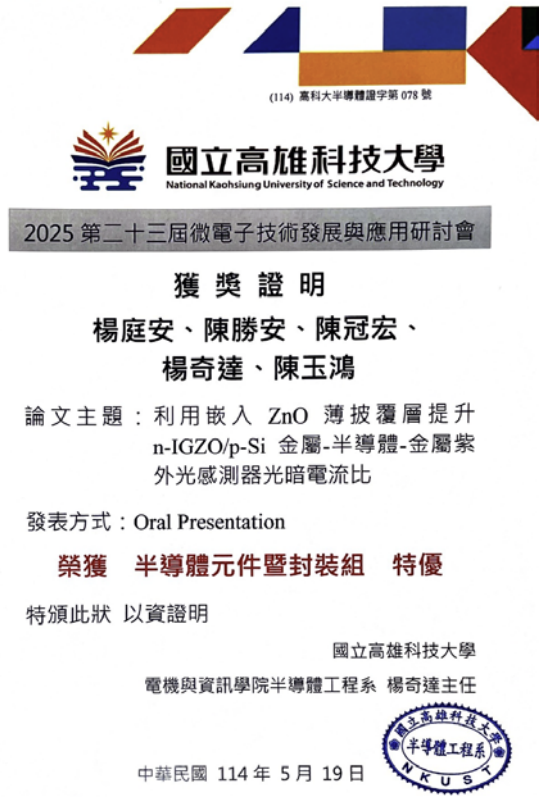
大會主席
General Chair

鄭煜禪

主辦單位：朝陽科技大學、國立高雄大學
中華民國民生電子學會、中華智慧運算學會

中華民國 114 年 05 月 16 日

9. 指導學生楊庭安、陳勝安、陳冠宏同學獲得第 23 屆 2025 微電子技術發展與應用研討會-半導體元件暨封裝組榮獲【特優】



(114) 高科大半導體證字第 078 號

國立高雄科技大學
National Kaohsiung University of Science and Technology

2025 第二十三屆微電子技術發展與應用研討會

獲 獎 證 明

楊庭安、陳勝安、陳冠宏、
楊奇達、陳玉鴻

論文主題：利用嵌入 ZnO 薄披覆層提升 n-IGZO/p-Si 金屬-半導體-金屬紫外光感測器光暗電流比

發表方式：Oral Presentation

榮獲 半導體元件暨封裝組 特優

特頒此狀 以資證明

國立高雄科技大學
電機與資訊學院半導體工程系 楊奇達主任

中華民國 114 年 5 月 19 日

國立高雄科技大學 半導體工程系 NKUST

10. 指導學生郭百峻、陳志安、顏菖逸同學獲得第 23 屆 2025 微電子技術發展與應用研討會-半導體元件暨封裝組榮獲【優勝】



(114) 高科大半導體證字第 081 號

國立高雄科技大學
National Kaohsiung University of Science and Technology

2025 第二十三屆微電子技術發展與應用研討會

獲 獎 證 明

郭百峻、陳志安、顏菖逸、
楊奇達、陳玉鴻

論文主題：射頻濺射銦鎵鋅氧化物層作為絕緣體及其在 MIM 二極體中的應用

發表方式：Poster Presentation

榮獲 半導體元件暨封裝組 優等

特頒此狀 以資證明

國立高雄科技大學
電機與資訊學院半導體工程系 楊奇達主任

中華民國 114 年 5 月 19 日

國立高雄科技大學 半導體工程系 NKUST

11. 指導學生饒家銘、廖彥鈞、林奎煥同學獲得 2024 International Workshop on Consumer Electronics (2024 iWCE)：【Best Poster Award】



iWCE 2024

2024 International Workshop on Consumer Electronics

Tao Yuan, Taiwan, November 22nd-23rd, 2024

Best Paper Award

Presented to

Chia-Ming Jao, Kuei-Huan Lin, Yen-Chun Liao, Xiu-Jia Guan, Zong-Liang Tseng, Chi-Da Yang and Yu-Hung Chen

for the paper (ID: 009)

Fabrication and Characterization of Copper Oxide Thin Film Resistance Random Access Memory Devices

by 2024 International Workshop on Consumer Electronics held at Lunghwa University of Science and Technology, Tao Yuan, Taiwan, November 22nd-23rd, 2024.

Syu-Jyun Peng, Tzu-Hsiang Ko

General Chair

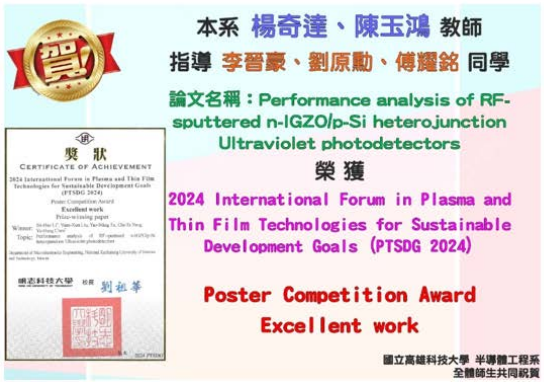
November 22nd-23rd, 2024

12. 指導學生饒家銘、夏峪珩、謝咏霖、廖彥鈞、林奎煥、陳至相同學參加 2024 年國立高雄科技大學電機與資訊學院學生實務專題製作競賽榮獲【電機電子組 優勝】




國立高雄科技大學
電機與資訊學院
獎狀
作品名稱：
「射頻磁控濺鍍法製備應用於電阻式記憶體(RRAM)之氧化銅薄膜的性能研究」
參賽學生：
饒家銘、夏峪珩、謝咏霖
廖彥鈞、林奎煥、陳至相
指導老師：陳玉鴻助理教授、葉旻彥教授
參加 2024 年國立高雄科技大學
電機與資訊學院學生實務專題製作競賽
榮獲
電機電子組優勝
特頒此狀 以茲鼓勵
院長李財福
中華民國 113 年 6 月 21 日

13. 指導學生李晉豪、劉原勳、傅耀銘同學獲得 2024 International Forum in Plasma and Thin Film Technologies for Sustainable Development Goals, PTSDG 2024：【Poster Competition Award Excellent Work】


本系 楊奇達、陳玉鴻 教師
指導 李晉豪、劉原勳、傅耀銘 同學
論文名稱：Performance analysis of RF-sputtered n-IGZO/p-Si heterojunction Ultraviolet photodetectors
榮獲
2024 International Forum in Plasma and Thin Film Technologies for Sustainable Development Goals (PTSDG 2024)
Poster Competition Award
Excellent work
國立高雄科技大學 半導體工程系
全體師生共同祝賀
獎狀
CERTIFICATE OF ACHIEVEMENT



14. 指導學生陳至相同學參加【2024 Symposium on Digital Life Technologies（數位生活科技研討會暨民生電子論壇）】榮獲【Best Poster Award】



15. 指導學生[謝咏霖(YONG-LIN XIE)、夏峪珩(YU-HENG XIA)、陳至相(ZHI-XIANG CHEN)]同學獲得 2023 International Forum in Plasma and Thin Film Technologies for Sustainable Development Goals, PTSDG 2023：【學生海報大賽一佳作】







16. 指導學生許誌顯、陳至相、陳亭佑、劉鴻禧同學獲得 International Conference on Smart Devices and Sustainable Energy (SDSE 2023)：**【Best Poster Award】**


Smart Devices and Sustainable Energy
November 7 - 9, 2023, New Taipei City, Taiwan
Ming Chi University of Technology

Best Poster Award

This is to certify that

Chih-Hsien Hsu , Zhi-Xiang Chen, Ting-You Chen, Hong-Shi Liu, Chi-Da Yang, Yu-Hung Chen

has been awarded **FIRST** place in a poster award at the International Conference on Smart Devices and Sustainable Energy 2023 (SDSE 2023) New Taipei City, Taiwan 7th-9th November 2023

Shaw-Wei Liu — Prof. Shaw-Wei Liu, SDSE 2023 Conference Chair, Organic Electronics Research Center, Ming Chi University of Technology, TW

Kuo-Yung Hung — Prof. Kuo-Yung Hung, SDSE 2023 Conference Chair, Research Center for Intelligent Medical Devices, Ming Chi University of Technology, TW



