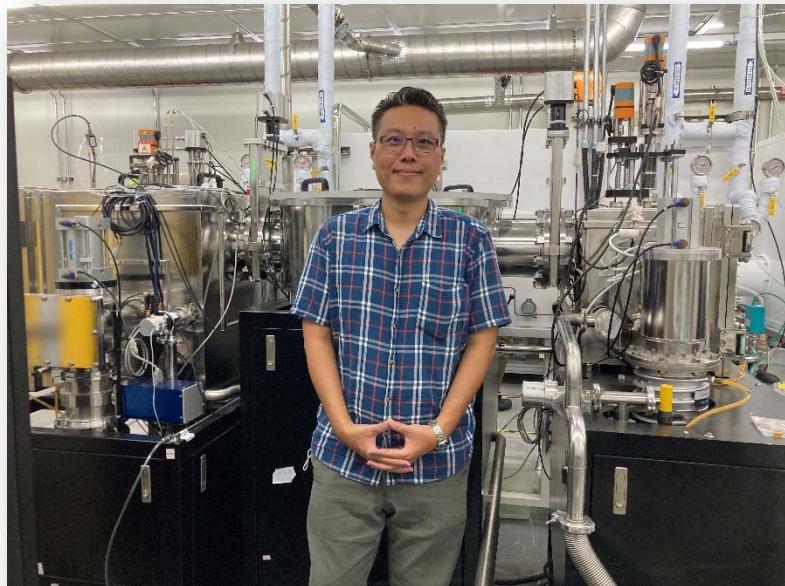


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D. Invention Patent(專利發明)

(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. 黃國璋, 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, 林宸澂, “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
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. 2022 年台灣電子材料與元件協會(EDMA)「傑出青年獎」
2. 2022 年再生能源與國家安全學術研討會「論文競賽優選獎」
3. 2022 年 PV Award 太陽光電創新應用產品設計競賽「入選獎」
4. 2022 年新竹縣產業總工會「111 年度模範勞工」
5. 2022 年工研院院級第二屆 2030 跨域議題海選「優勝」
6. 2021 年工研院綠能所創意發想「點子計畫獎」
7. 2021 年工業技術研究院專利地圖分析與布局競賽 冠軍
8. 2020 年全球百大科技研發獎 (R&D 100 Awards)「染料敏化電池應用於智慧家庭技術/Dye-sensitized cell (DSC) as Energy source of Sensors, D-EOS」
9. 2019 年工業技術研究院 108 年全院級之「傑出研究獎」
10. 2016、2017、2018、2019 年國立暨南國際大學「教學評量獎(得分前 10% 課程)」
11. 2013 年世界名人錄 (Marquis Who'sWho in the World)

12. 2012 年內政部研發替代役制度「100 年度績優研發替代役役男」
13. 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」
14. 2007 年日月光公司之日月之光菁英論文獎「佳作」
15. 2005 年台灣光電科技研討會「學術壁報論文獎」
16. 2005 年中華民國斐陶斐榮譽學會「榮譽會員」

F. **Student Awards(指導學生獲獎)**

1. 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—佳作】

