能源電池科技博士學位學程
Ph.D. Program of Energy and Battery Technology

一、師資

職稱	姓名	學歷	專長
講座教授 兼綠能中心主任 兼學程主任	楊純誠 Chun-Chen Yang	美國哥倫比亞大學 化工博士	電化學、電化學工程、電池技術、高分子電解質膜
教授	壽雅史 Kotobuki, Masashi	University of Yamanashi, Graduate School of Engineering 博士	固態電解質奈米材料合成分析、材料特性分析、鋰電池材料分析
助理教授	洪太峰 Hung, Tai-Feng	中原大學 化學研究所博士	儲能元件關鍵材料開發與系統設計、奈米複合雙效觸媒結構設計與合成、電化學檢測與分析、高分子合成與加工

二、期刊論文

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三、研討會論文

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四、研究及產學合作計畫

單位:元

項次	主持人	計畫名稱	委託單位	起訖日期	總計	政府	企業	本校
1	洪太峰	高效鹼金屬離子電容器核心材料開發與儲能機制研究(2/3)	國科會	111/01/01 111/12/31	1,400,000	1,400,000	0	0
2	楊純誠	應用泰勒擾流式反應器合成高克電容量高鎳-鋰鎳鈷鋁錳(NCAM) 正極材料及全固態鋰電池組裝與電性分析	國科會	111/08/01 112/07/31	909,000	909,000	0	0
3	楊純誠	綠色能源永續產業接軌及女性研發人才培育計畫	教育部	111/08/01 112/07/31	3,300,000	3,000,000	0	300,000
4	壽雅史	氯離子電池之新型電解質的開發	國科會	111/03/01 112/02/28	881,000	881,000	0	0
5	壽雅史	使用新型玻璃陶瓷電解質之全固態鈉電池的研製(1/3)	國科會	111/08/01 112/07/31	1,451,000	1,451,000	0	0
6	洪太峰	碳包覆鈦磷酸材料合成、XRD 晶相鑑定、電子顯微結構、熱重及循環伏安分析	財團法人工業技術研究院	111/03/15 111/11/30	500,000	0	500,000	0
7	楊純誠	複合式矽-石墨烯-石墨/碳製備合成及材料相關物化性性質檢測及電性分析	南亞塑膠工業股份有限公司	111/02/15 111/12/31	1,200,000	0	1,200,000	0
8	楊純誠	鋰電池原理介紹及電性分析實作	南亞塑膠工業股份有限公司	111/07/01 111/12/31	200,000	0	200,000	0
9	楊純誠	開發可量產技術高能量密度的高鎳 NCM811 氧化物(LiNi0.8Co0.1Mn0.1O2)正極材料	南亞塑膠工業股份有限公司	111/05/01 112/04/30	1,500,000	0	1,500,000	0

項次	主持人	計畫名稱	委託單位	起訖日期	總計	政府	企業	本校
10	楊純誠	製備長壽命穩態電致變色層全固態電致變色玻璃技術開發計畫	宏益玻璃科技股份有限公司	111/08/01 112/07/31	2,000,000	0	2,000,000	0
11	楊純誠	紅外線吸收玻璃特性之檢測技術(V)	白金科技股份有限公司	111/06/01 112/12/31	200,000	0	200,000	0
12	吳宜萱	磷酸鋰鐵正極材料塗佈於奈米石墨稀/鋁箔複合型集電層之物化性檢測與組成 CR2032 鈕扣型電池的電性分析	優材科技有限公司	111/07/01 111/12/31	300,000	0	300,000	0
合計					13,841,000	7,641,000	5,900,000	300,000

五、專利

項次	發明人	專利權人	專利名稱	類別	證書字號	專利國家	生效日期
1	楊純誠	明志科技大學	利用連續式泰勒流動反應器製備富鎳氫氧化物前驅物與富鎳正極複合材料之製備方法	發明專利	I781427	國內	111/10/21
2	楊純誠	明志科技大學	矽/還原態皺褶式氧化石墨烯/碳複合負極材料之製備方法及其在儲能系統之應用	發明專利	I772686	國內	111/08/01
3	楊純誠	明志科技大學	固態複合高分子電解質膜及全固態鋰電池	發明專利	I784918	國內	111/11/21
4	楊純誠	明志科技大學	全固態複合式高分子電解質膜的製備方法及全固態鋰電池	發明專利	I756162	國內	111/02/21
5	楊純誠	明志科技大學	複合式固態電解質膜之製備方法、及使用該複合式固態電解質膜之全固態鋰電池	發明專利	JP7093588B2	日本	111/06/22

項次	發明人	專利權人	專利名稱	類別	證書字號	專利國家	生效日期
6	楊純誠	明志科技大學	用於全固態鋰電池的鋰離子傳導組成物、固態聚合物電解質及全固態鋰電池	發明專利	ZL 2019 1 0926237.5	大陸	111/06/10

六、研究生論文

項次	研究生姓名	論文題目	指導教授
1	瓦利	Multi-layer Hybrid Solid Polymer Electrolytes for High Voltage Cathodes in All-Solid-State Lithium-Metal Batteries	楊純誠
2	陳懷康	複合高分子固態電解質應用於全固態鋰電池	楊純誠
3	張氏佩塔	利用層流連續式泰勒反應器製備富鎳 Lix[Ni0.6Co0.2Mn0.2]O2 陰極材料以及石墨/矽/碳複合陽極材料進行 LiPAA 包覆改質應用於鋰離子電池	楊純誠
4	西蒙	開發用於高能量密度鋰金屬電池的複合式固態電解質膜	楊純誠
5	安雷諾	以支狀寡聚物表面塗層提升鋰離子電池 Li[Ni1-x-yCoxMny]O2 (LNCM)正極材料的電化學性能	簡文鎮


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