

# 能源技術國際合作、認證研究與專利/技術產業化 鏈結鏈結

執行單位

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計畫主持人

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- 藉由能源技術國際合作、產業技轉推廣與檢測認證，及研發專利成果分享與技術產業化鏈結兩大主題，執行全面之技術 / 專利分析研究，促成專利授權、產學合作及技術商品化、整合與增值，並帶動綠能與能源相關產業的發展。

NEP 第二期能源國家型科技計畫  
National Energy Program-Phase II

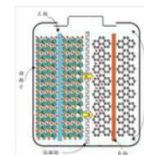
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Tech. Type: 生質能  
Patent Type: 發明  
Patent Owner: 大學

Publication Date: 2017-5-2  
Tech. Relevance: [dropdown]  
Search

Publication #	Title	Assignees	Abstract	Inventors	Filing Date	Action
EP1655265...	Method of prepar...	ACADEMIA SINICA	This invention discloses an electrochem...	ING SHOU...	2004-12-23	More
US7507320...	Single-atom tip s...	ACADEMIA SINICA	This invention discloses an electrochem...	Ing-Shouh...	2004-10-09	More
US7691624...	Cancer cell dete...	ACADEMIA SINICA	This invention relates to a device for dete...	Ta-Chau C...	2006-10-18	More
US8685843...	Direct growth of graphene on substrates	ACADEMIA SINICA	Graphene layers can be formed on a die...	Lain-Jong L...	2012-01-09	More
US8138472...	Molecular ion accelerator	ACADEMIA SINICA	A novel system and methods for acceler...	Chung Hsu...	2009-04-29	More
US7527958...	Truncated 1,3-1,4-beta-D-glucanase	ACADEMIA SINICA	A truncated 1,3-1,4-beta-D-glucanase. A...	Lie-Fen Shy...	2004-02-06	More
US7547455...	Cancer and inflammatory disorder treat...	ACADEMIA SINICA	Disclosed are extracts, compositions, a...	Lie-Fen Shy...	2007-09-20	More
US7052783	Oxazoline tetramers	ACADEMIA SINICA	This invention relates to tetracheryl/meth...	Chin-Ti Che	2001-11-28	More

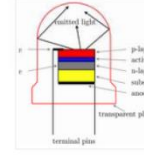
## 特定技術領域專利分析



### 錐鐵磷酸電池

錐鐵磷酸 (分子式:  $\text{LiFePO}_4$ , 英文: Lithium iron phosphate, 又稱磷酸錐鐵、錐鐵磷, 簡稱 LFP), 是一種錐鐵離子電池 (可另外參見錐鐵電池) 的正極材料。以其正極材料命名的錐鐵錐鐵電池也稱為錐鐵電池, 特色是不含鎳等貴重元素, 原料價格低且耐、儲存在於地球的資源含量豐富, 不會有供料問題。其工作電壓達中 (3.2V)、單位重量下電容量大 (170mAh/g)、高放電功率、可快速充電且循環壽命長, 在高溫與高熱環境下的穩定性高。

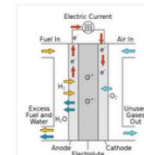
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### LED 發明

LED 是發光二極體 (Light Emitting Diode, LED) 的簡稱, 也被稱為發光二極管。這種半導體組件發展以來一般是作為指示燈、顯示板, 但目前隨著技術增加, 已經能作為光源使用, 它不但能夠高效率地直接將電能轉化為光能, 而且擁有最長達數小時~10 萬小時的使用壽命, 同時具備不若傳統燈泡易碎, 並能省電, 同時擁有環保無汞、體積小、可應用在低溫環境、光源具方向性、造成光害少與色域豐富等優點。

[下載相關專利分析檔](#)



### 直接甲醇燃料電池

直接甲醇燃料電池 (Direct-methanol fuel cells, 簡稱 DMFCs) 是質子交換膜燃料電池的一種, 使用甲醇 (分子式:  $\text{CH}_3\text{OH}$ ) 作為發電的燃料。直接甲醇燃料電池主要的優點, 在於甲醇便於攜帶、高能源密度、在各種環境下都能保持液態, 並且不需要如間接式燃料電池需要複雜的汽化產生氫氣的過程。由於發電效率普遍不高, 因此主要針對的目標為攜帶式的應用, 這種情況下能量與功率密度要求高於發電效率。

[下載相關專利分析檔](#)

- 本計畫包含五個分項：
  - ◆ 分項一：重要能源科技相關研發專利成果之分析
  - ◆ 分項二：盤點重要能源科技相關研發專利
  - ◆ 分項三：探求產業界及學研界之與技術落差
  - ◆ 分項四：配合能源二期團隊，以系統化方式專利技術媒合資訊，以建構專利服務平台回饋
  - ◆ 分項五：具體促成國際以及國內技轉實績，鏈結對應廠商，提供能源科技學術成果產業化推展之解決方案，並輔以進行綠能基礎建設與人才培訓
- 本計畫先以太陽光電、替代能源領域以及智能電網領域為主要研究範圍，輔以能源二期之其他如離岸風力發電、地熱與海洋能主軸，進行技術驗證與專利分析整合，並提供媒合資訊之廠商名單，共同落實科技研發能量產業化及建構產學交流平台方能具體促進國際性與國內之專利技術與媒合。

# International cooperation, certification research and patent/technology industrialization on Energy Technology

Execution Unit

NCTU, NTUST

Project Director

Prof. Ching-Yao Huang

- The objectives are the management of the related technology and patents created by through the international cooperation of energy technology, the research on the promotion and authentication of industry and technology. The major themes will be achieved by sharing patent information and technological industrialization chain. According to implement the comprehensive technology certification and technology/patent analysis research, we can promote patent licensing, prototype production, and commercialization, integration, enhancing the value of technology, which will lead to the development of green energy related industries.

- The project will focus on future industry impact to link Shalun Green Energy Science City Office by aiming at the development and application of energy-national science and technology projects. The patent search analysis methods and tools can gradually promote in the field of energy research and development and management, and systematize the production of information to facilitate sustainable long-term use.
- The project first takes the solar photovoltaic, the alternative energy domain and the smart grid domain as the main research scope, supplemented by other such as offshore wind power, the geothermal and the marine energy spindle, carries on the technical verification and the patent analysis conformity, and provides the list of the manufacturer of the cooperation information. The joint implementation of the energy industrialization of scientific research and development and the construction of the platform can specifically promote international and domestic patent technology and transfer.