

附件四、技術說明表



新型鋰離子電池陽極材料

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市場及需求：

本技術係關於一種合成鋰離子電池陽極材料之新型技術，該材料為一種適用於電動車長期穩定使用之材料。與傳統電池技術相比，鋰離子電池充電速度更快、使用更持久，並且具有更高的功率密度，能以輕巧的體積提供更長效的電池續航力。本技術製備之鋰離子電池陽極材料，可經過特殊製程增加其充放電容量，有效解決鋰電池充放電容量不足之問題。

技術摘要(含成果)：

本技術係一種鋰離子電池陽極材料之特殊增加充放電容量之方法，可有效提高鋰離子電池之能量密度。

優勢：

本技術製備高充放電容量之鋰離子電池陽極材料，透過本新型技術可有效增加鋰離子電池之能量密度。

競爭產品：

與本技術競爭產品為傳統鋰離子陽極材料。因既往製備所製備材料充放電容量不足，故無法作為大型電池，使鋰電池發展受到限制。

專利現況：

- (1)本技術將申請中華民國專利。
- (2)本技術團隊教授具有研究陶瓷材料二十年以上經驗。
- (3)本研究團隊具有十年以上研究螢光材料經驗。
- (4)本技術團隊教授為本校特聘教授，並獲得多次國科會傑出研究獎。

聯絡方式(請不用填)：

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New anode materials used in lithium-ion batteries

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Market Needs:

The technology is related to synthesis anode materials of lithium-ion battery which are suitable for long-term stable use of electric vehicles. Compared to traditional battery technology, lithium-ion batteries can be charge faster, long-term use, and higher power density, and provide longer-lasting battery life in a lightweight package. This technology synthesizes the anode materials of lithium-ion battery using a new technology to increase the charge/discharge capacity of lithium-ion batteries.

Our Technology:

The present technology is related to a new process to increase charge/discharge capacity of lithium-ion batteries. This energy density of lithium-ion batteries can be greatly enhanced.

Strength:

This technology uses new methods to prepare the anode materials with high charge/discharge capacity of lithium-ion batteries. This technology can effectively increase the energy density of lithium-ion batteries

Competing Products:

The charge/discharge capacity of previous anode materials is insufficient. Therefore, the application of lithium-ion batteries is limited.

Intellectual Properties:

- (1) This technology will be filed as a patent in our country.
- (2) The professor in the research team has studied ceramic materials for more than twenty years.
- (3) The research team has studied phosphors materials for more than ten years.
- (4) The professor in the research team is a distinguished professor at NTU, and has obtained many rewards from NSC.

Contact (do not need to fill out):

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