

附件四、技術說明表



螢光材料合成技術

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提案人：呂宗昕教授

市場及需求：

本技術係關於一種螢光材料，尤其是，一種適用於發光二極體光源之螢光粉體。本技術之螢光材料亦可與其他螢光粉體組合使用。本技術復提供一種發光裝置，其具有本技術之螢光粉體。

技術摘要：本技術係一種螢光材料之製備方法，可提高其發光特性及材料穩定性。可使用於 LED 發光裝置，俾符合照明及顯示器產業需求。

優勢：

根據本技術利用反應設計，配合特殊材料條件，以製備高亮度螢光粉體，獲得高發光亮度之螢光體。

競爭產品：

與本技術競爭產品為傳統螢光材料製備技術，因傳統製備技術製得材料穩定度低，故限制其發展。本技術可改善上述缺失，提高產品競爭力。

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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Synthesis technology of phosphor materials

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Market Needs:

The present technology is related to a process to prepare phosphors LED devices. The prepared phosphors can be used with other phosphors. This technology also provides a lighting device using the prepared phosphors.

Our Technology:

The present technology is related to a process to enhance the properties and stability of phosphors. The prepared materials can be used in LED devices for lighting and display technology.

Strength:

This technology use the design of reactions combined the synthesis conditions to prepare the phosphors having high luminescence. The prepared phosphors can generate high luminescence.

Competing Products:

The previous phosphor materials have low stability, and the application for this kind of materials is limited. This technology can improve the drawbacks of the previous materials, and enhance the competition ability.

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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