

# 聚光型太陽能光電供發電系統設計

蘇義傑、蔡煥良；陳昭翰

E-mail: 9806474@mail.dyu.edu.tw

## 摘要

本文提出的模型是由通用型太陽能電池模組和V型槽完成，使用Matlab/Simulink套裝軟體，模擬典型的太陽能電池、模組、陣列，並且能夠輕易的在模擬平台上使用。本文提出的模型是由容易操作的圖形和對話方塊所設計，像是Matlab/Simulink圖形資料庫。這使得聚光型太陽能電池模組容易被模擬，並且分析溫度和日照強度對太陽能電池的影響。把日照強度和電池溫度的影響列入考慮，使用提出的模型模擬輸出電流和功率的光電模型，這使得光電電力系統的動力學能夠容易地被模擬、分析、並且最佳化。

關鍵詞：太陽能電池模組、V型槽、Matlab/Simulink

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