



2022「中技社科技獎學金」

2022CTCI Foundation Science and Technology Scholarship

研究獎學金 Research Scholarship



溶液製備有機半導體及其混摻材料於電晶體及光電晶體元件應用 Solution Processable Organic Semiconductors and Their Blends for Transistor and Phototransistor Application



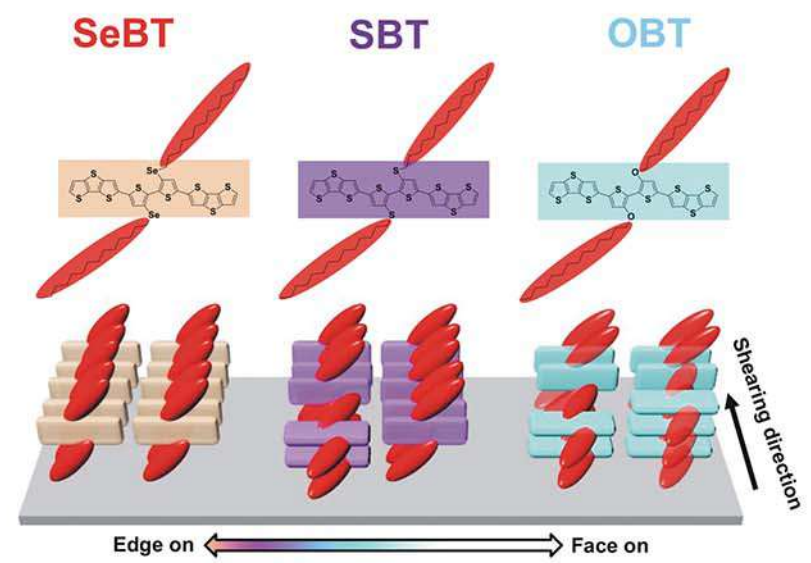
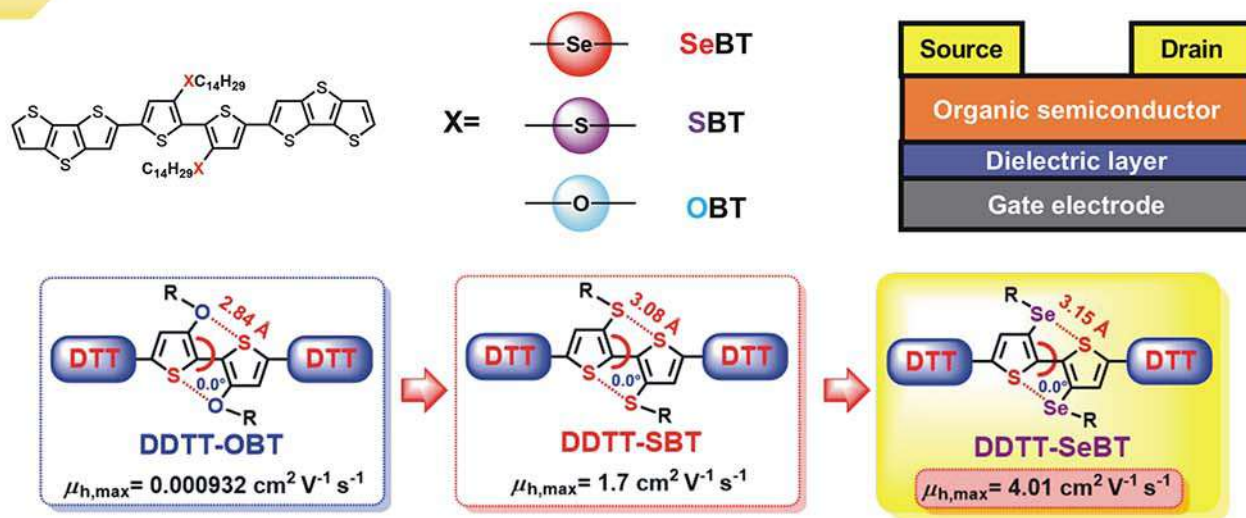
國立中央大學 化學工程與材料工程學系博士班四年級 林珈琪
指導老師：劉振良教授、李岱洲教授

研究重點

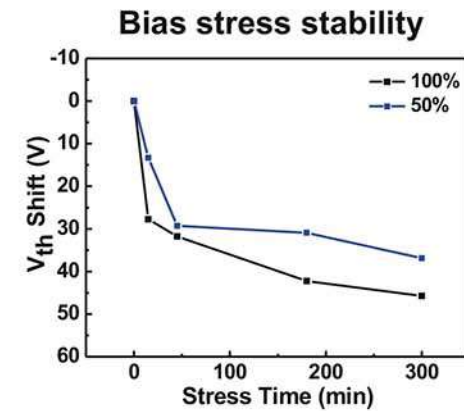
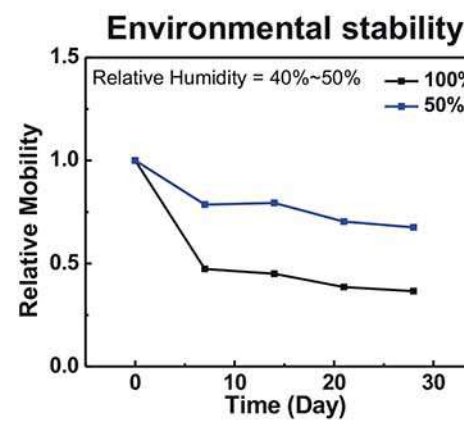
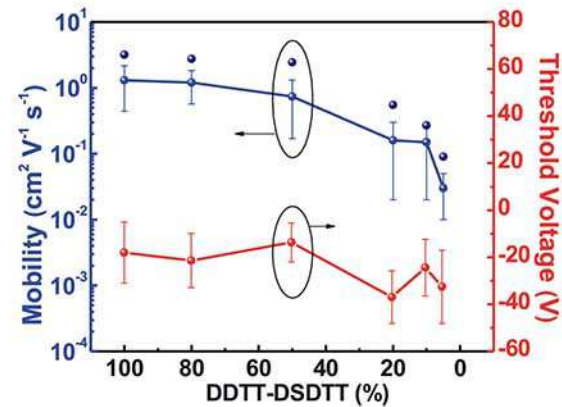
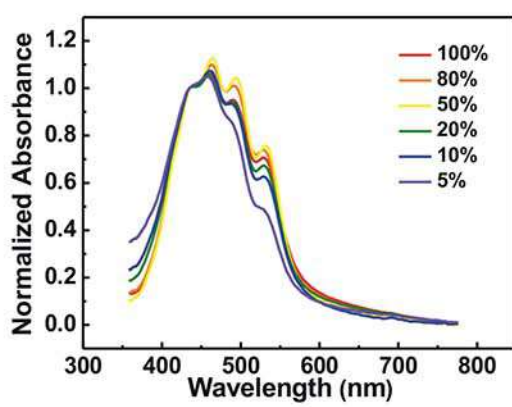
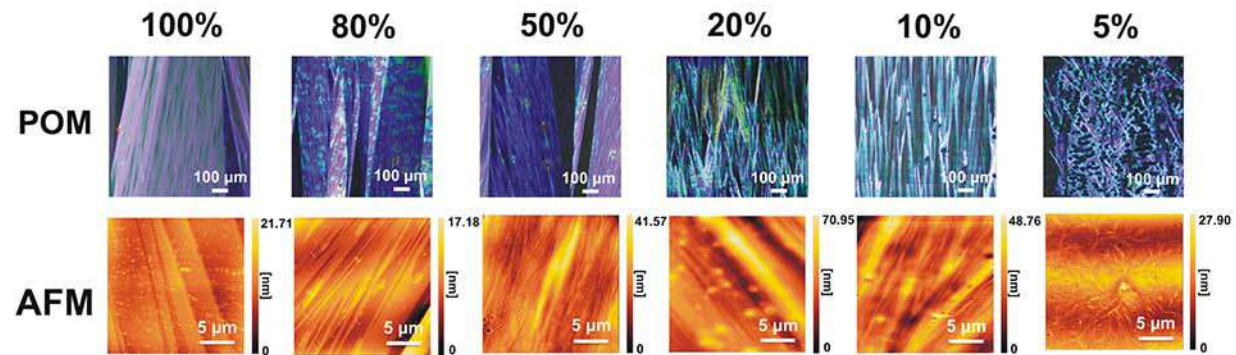
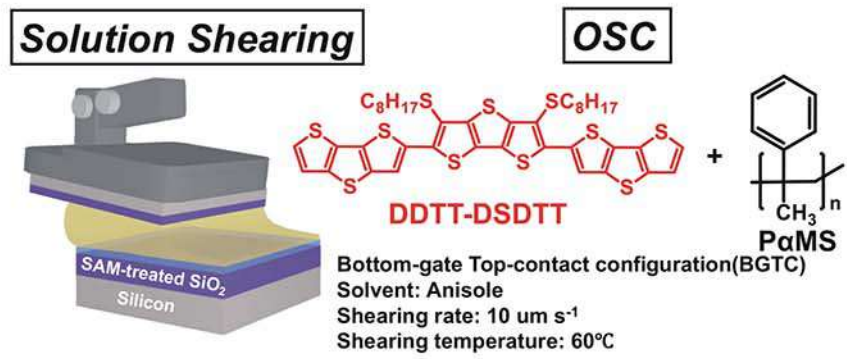
Organic semiconductors have the advantages of low temperature process, low cost, good ductility, and molecular design, which are favorable for large area coating and can be applied on flexible electronic application such as flexible displays, sensors, transistors, and solar cells. Therefore, this research is focusing on the study of the molecular design and blending system of organic materials for electronic application.

研究成果

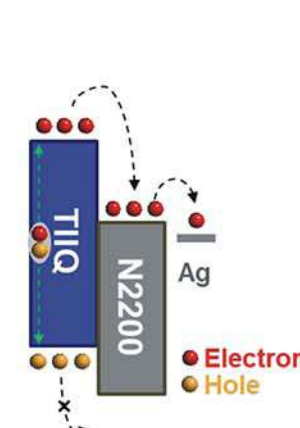
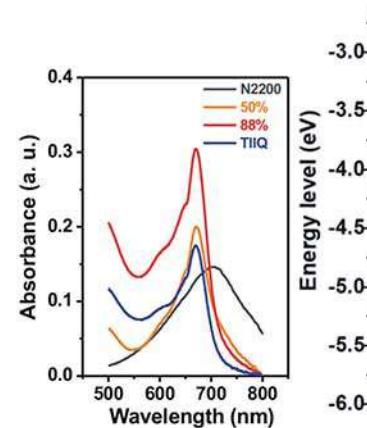
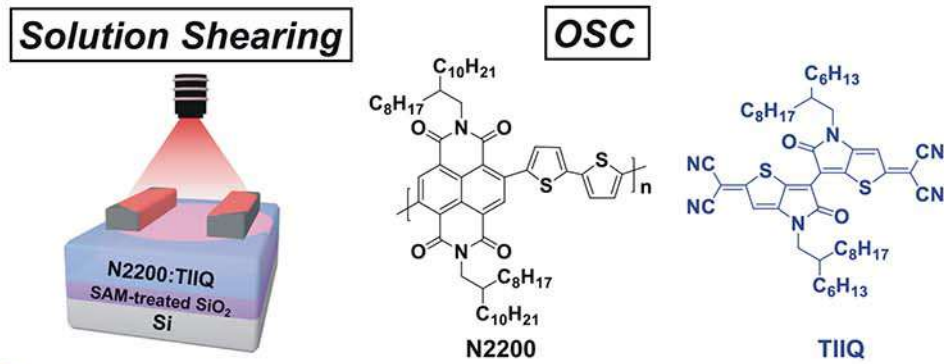
Topic 1



Topic 2



Topic 3



Compound	μ_{Max} [$\text{cm}^2 \text{ V}^{-1} \text{ s}^{-1}$]	R [A W^{-1}]
N2200	0.17	0.12
50%	1.18	136
88%	1.59	4065
TIIQ	2.54	1848

得獎心得

非常感謝中技社和各位評審委員對我的肯定，謝謝我的指導老師劉振良教授以及李岱洲教授，研究過程中雖然經歷許多波折與挑戰，但在這段時間也讓我成長了不少，謝謝劉老師讓我有幸到國外參與不同的研究，增廣我的見聞，激發我許多研究的方向。謝謝我的父母一路上的支持與鼓勵，他們陪伴我面對各種挑戰是我永遠的避風港。最後再次感謝中技社以及委員們的肯定，並期許自己在未來能貢獻所學的為社會盡一份心力以回饋社會。



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