

第四章 實驗

4-1 實驗材料與藥品

微透鏡陣列方面：

- i. 聚二甲基矽氧烷(poly (dimethylsiloxane),PDMS) (圖 4-1)
- ii. 3,3,3-Trifluoropropyl-trichlorosilane (TFPTS) (圖 4-2)
- iii. Propylene glycol monomethyl ether acetate (PGMEA)
- iv. 蓋玻片 ($2.2 \times 2.2 \text{ cm}^2$)
- v. (tridecafluoro-1,1,2,2-tetrahydrooctyl)trichlorosilane (FOTS) (圖 4-3)
- vi. heptane
- vii. UV 膠 (NOA65)

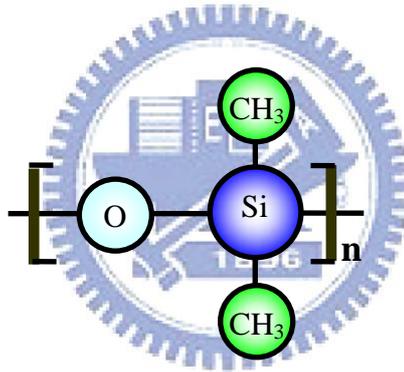


圖 4-1 PDMS

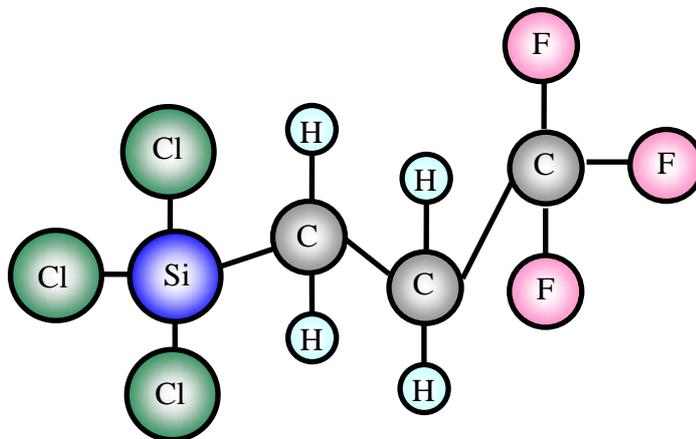


圖 4-2 TFPTS

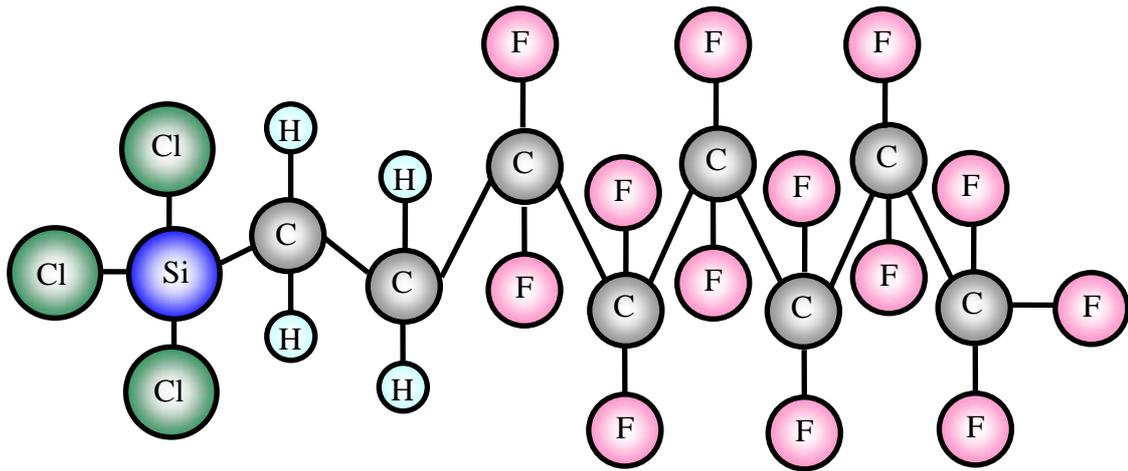


圖 4-3 FOTS

- i. 圖案化好的 ITO 玻璃 ($1.5 \times 1.5 \text{ cm}^2$)
- ii. 3,4-polyethylenedioxythiophene-polystyrenesulfonate (PEDOT : PSS) (圖 4-4)
- iii. Poly(N-vinylcarbazole)(PVK) (圖 4-5)
- iv. 2-(biphenyl-4-yl)-5-(4-tert-butylphenyl)-1,3,4-oxadiazole(PBD) (圖 4-6)
- v. tris(2-(4-tolyl)phenylpyridine)iridium (Ir(mPPy)3) (圖 4-7)
- vi. Ca/Al

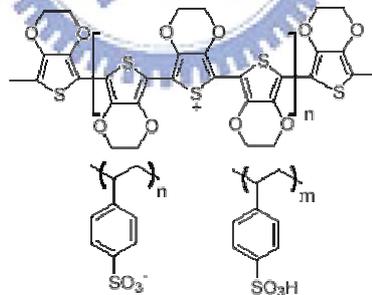


圖 4-4 PEDOT : PSS

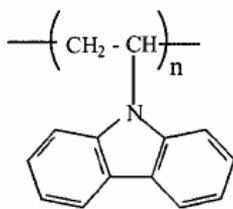


圖 4-5 PVK

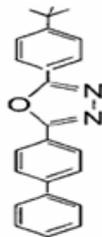


圖 4-6 PBD

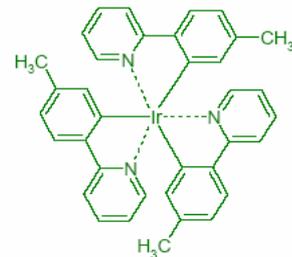


圖 4-7 Ir(mPPy)3