Table I The various values of the dielectric constant and the constant β_{PF}/k_BT at Ar/N_2 ratio: 2/5, 2/7, 2/9.

Ar/N_2 ratio	2/5	2/7	2/9
Dielectric constant (Frequency=800KHz)	6.28	6.82	7.32
$\frac{\beta_{PF}}{k_BT}$ (cm/MV)$^{1/2}$	11.7	11.2	10.8
Dielectric constant (ε_r) ($\varepsilon_r = \frac{q^3}{(\beta/k_BT)^2 \pi\varepsilon_0}$)	6.8	7.1	7.2

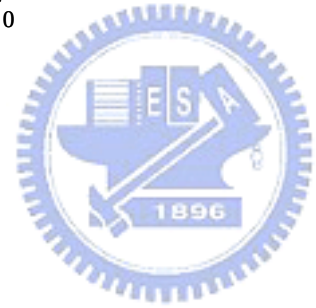

Table II Comparison of contact angle and surface free energy for various substrates.

Substratete	Contact Angle (Dgree)			Surface Free Energy (mJ/m^2)	Ref.
	D.I. Water	Glycerol	Di-iodomethane		
Al_2O_3	**20-37**			**68-78**	**[57]**
Si_3N_4	**20-30**			**55-60**	**[58]**
SiO_2	**35.7**	**22.4**	**25.1**	**60**	**[49]**
PVA	**64±0.9**		**25±0.7**	**54.5**	**[56]**
HMDs+SiO_2	**53.7**	**53.7**	**43.9**	**45.4**	**[49]**
PVP				**42**	**[50]**
Pentacene				**42-48**	**[51]**
AlN	**77.0±2**	**57.6±2**	**40.4±4**	**38.5±1**	**This study**
OTS+SiO_2	**78.9**	**81.1**	**43.9**	**34.9**	**[49]**