

Oxford 100 Material Etch Rates							
Material:	SiO2 5% Area	SiO2 100% Area	SiN 5% Area	SiN 100% Area	Si	S1813 +	S1813 +
Recipe:	BB CF4/O2 10mT	BB CF4/O2 10mT	BB CF4/O2 10mT	BB CF4/O2 10mT	BB CF4/O2 10mT	BB CF4/O2 10mT	BB O2 10mT
% Area Etched:	5	100	5	100	5	5	5
Gas 1:	O2	O2	O2	O2	O2	O3	O2
Flow (sccm):	5	5	5	5	5	5	50
Gas 2:	CF4	CF4	CF4	CF4	CF4	CF4	N/A
Flow (sccm):	50	50	50	50	50	50	N/A
Set Pressure (mT):	10	10	10	10	10	10	10
Set Chuck Temperature (°C)	26	28	26	28	26	26	26
<b>Powers:</b>							
ICP Forward (W)	500	500	500	500	500	500	500
RF CCP (W)	100	100	100	100	100	100	100
<b>Average Etch Rate (nm/min):</b>	<b>113.85</b>	<b>94.41</b>	<b>163.70</b>	<b>161.05</b>	<b>164.53</b>	<b>251.16</b>	<b>705.01</b>
%Uniformity:	<b>5.78</b>	<b>3.81</b>	<b>5.68</b>	<b>3.89</b>	<b>4.90</b>	<b>6.79</b>	<b>3.84</b>
Run to Run %Uniformity	<b>7.17</b>	<b>7.04</b>	<b>7.00</b>	<b>7.85</b>	<b>6.83</b>	<b>14.74</b>	<b>6.35</b>
<b>Average Selectivity:</b>							
Material : SiO2 5% Area Etched	1 : 1.00	1 : 1.21	1 : 0.70	1 : 0.71	1 : 0.69	1 : 0.45	N/A
Material: SiO2 100% Area Etched	1 : 0.83	1 : 1.00	1 : 0.58	1 : 0.59	1 : 0.57	1 : 0.38	N/A
Material : SiN 5% Area Etched	1 : 1.44	1 : 1.73	1 : 1.00	1 : 1.02	1 : 0.99	1 : 0.65	N/A
Material : SiN 100% Area Etched	1 : 1.41	1 : 1.71	1 : 0.98	1 : 1.00	1 : 0.98	1 : 0.64	N/A
Material : Si	1 : 1.45	1 : 1.74	1 : 1.00	1 : 1.02	1 : 1.00	1 : 0.66	N/A
Material : S1813 + (BB CF4/O2 10 mT)	1 : 2.21	1 : 2.66	1 : 1.53	1 : 1.56	1 : 1.53	1 : 1.00	N/A
Material : S1813 + (BB O2 10 mT)	1 : 6.19	1 : 7.47	1 : 4.31	1 : 4.38	1 : 4.28	1 : 2.81	N/A