

Oxford 82-Molybdenum etch DOE

Total flow: SF6 + O2 = 100 sccm

Factors:

O2%: 10-30%

RIE: 150-200W

Pressure: 30-50mT

Level settings:

O2(sccm): 10, 20, 30

RIE: 150, 175, 200W

Pressure: 30, 40, 50mT

Run	Power	Pressure	O2	DC	Mo-ER	S-PR
1	150	30	10	63	47	0.35
2	150	40	20	63	68	0.46
3	150	50	30	63	51	0.31
4	175	30	20	74	54	0.30
5	175	40	30	74	53	0.27
6	175	50	10	66	86	0.42
7	200	30	30	83	66	0.28
8	200	40	10	75	94	0.43
9	200	50	20	77	78	0.33

Optimized process setting: SF6=90, O2=10, 200W, 40mT, ER=94nm/min