

## AJA System Sputtering Rates

Rev. 8/18/15

Material	Process Gas	Gas Flow (sccm)	Gun #	Target Thickness (")	Power	Ramp Up/Down (sec)	Forward Power (W)	Reflected Power (W)	Sample Rotation (%)	Sample Height (mm)	Process Pressure (mTorr)	Average Rate (Å/s)	Uniformity (%)	Comments
Al	Ar	10	1	0.250	DC 10%	0	75	0	40	30	4.4	0.445	0.9	Large Grains
Al <sub>2</sub> O <sub>3</sub>	Ar	10	2	0.290	RF 100%	600	300	2-5	40	30	4.4	0.259	2.2	
C	Ar	10	2		RF 90%	300	270		40	30	4.4	0.120		
Co	Ar	10	5	0.125	DC 10%	0	75	0	40	30	4.4	0.550	2.6	
Co <sub>20</sub> Fe <sub>60</sub> B <sub>20</sub> (at%)	Ar	10	5	0.100	DC 10%	0	75	0	40	30	4.4	0.327	1.6	
CoO														
Cr	Ar	10	3	0.250	DC 6%	0	45	0-1	40	30	4.4	0.391	1.9	
Cu	Ar	10		0.250	DC 10%	0	75		40	30	4.4	1.456		
Fe	Ar	10	1	0.125	DC 10%	0	75	0-1	40	30	4.4	0.528	4.3	
Fe <sub>3</sub> O <sub>4</sub>														
ITO	Ar	10	2		RF 25%	300	75		40	30	3.0	0.534		
MgO	Ar	10	2	0.290	RF 100%	600	300	3-5	40	30	4.4	0.159	3.6	
Mo														
Ni	Ar	10	5	0.125	DC 10%	0	75	0	40	30	4.4	0.601	6.0	
Ni <sub>80</sub> Fe <sub>20</sub> (at%)	Ar	10	5	0.100	DC 10%	0	75	0-1	40	30	4.4	0.584	2.9	
Pd	Ar	10	4	0.125	DC 2.5%	0	18	0-1	40	30	4.4	0.408	5.1	
Pt	Ar	10	4	0.250	DC 2.5%	0	18	0	40	30	4.4	0.365	2.8	
Si	Ar	10	4	0.300	RF 75%	180	225	0-3	40	30	4.4	0.502	1.9	
SiO <sub>2</sub>	Ar	10	2	0.290	RF 100%	300	300	2-5	40	30	4.4	0.417	4.2	
Ta	Ar	10	3	0.250	DC 5%	0	37	0-1	40	30	4.4	0.391	6.3	
Ti	Ar	10	1	0.250	DC 10%	0	75	0	40	30	4.4	0.318	2.2	
TiN	Ar	10	2		RF 80%	180	240		40	30	4.0	0.206		
TiO <sub>2</sub>														
W														
Zr														

**\* Old Rate – Only use as a starting point for new rates.**

**All rates were established at room temperature.**

**Only Staff may change targets on this tool!**