

| Film | Step | Target | cath # | T° [°C] | Z PS [mm] | Wait Press. [mbar] | Ar [sccm] | O ₂ [sccm] | N ₂ [sccm] | Press. [mbar] | Source | Power [W] | Target clean [min:ss] | Max duration [hh:min:ss] | Dep. Rate [A.s ⁻¹] @center | Dep. Rate [A.s ⁻¹] average | Uniformity [%] Ø80mm | Resistivity [μΩ.cm] | Stress [MPa] | Référence | Max Thick [nm] |
|----------------------|---------------|--------|--------|---------|-----------|--------------------|-----------|-----------------------|-----------------------|---------------|--------|-----------|-----------------------|--------------------------|--|--|----------------------|---------------------|--------------|---------------------------|----------------|
| Plasma Activation O2 | A | | | 20 | 80 | 1.0E-05 | 0 | 20 | 0 | 5.0E-03 | RF2 | 30 | | | | | | | | | 0 |
| Plasma Oxidation | O | | | 20 | 80 | 1.0E-05 | 0 | 20 | 0 | 5.0E-03 | RF2 | 100 | | | | | | | | | 0 |
| RF-etch Ar | E | | | 20 | 80 | 1.0E-05 | 50 | 0 | 0 | 9.0E-02 | RF2 | 100 | | | | | | | | | 0 |
| RF-etch Ar | E+ | | | 20 | 80 | 1.0E-05 | 50 | 0 | 0 | 9.0E-02 | RF2 | 150 | | | | | | | | | 0 |
| Ag | Ag_fast | Ag | 2 | 20 | 30 | 1.0E-06 | 30 | 0 | 0 | 5.0E-03 | DC | 200 | 00:30 | 00:10:00 | 33.8 | 28.5 | 15.2% | 2.65 | 32 | 025, | 1710 |
| Ag | Ag_unif | Ag | 2 | 20 | 80 | 1.0E-06 | 30 | 0 | 0 | 5.0E-03 | DC | 250 | 00:30 | 00:15:00 | 19.2 | 17.4 | 8.5% | 2.60 | 14 | 024, | 1560 |
| Ag | Ag_slow | Ag | 2 | 20 | 80 | 1.0E-06 | 30 | 0 | 0 | 5.0E-03 | DC | 50 | 00:30 | 00:15:00 | | | | | | | 0 |
| Ag2O | Ag2O_unif | Ag | 2 | 20 | 80 | 5.0E-06 | 50 | 2.5 | 0 | 4.0E-02 | RF1 | 260 | 03:10 | 00:30:00 | | | | | | | 0 |
| Al | Al_fast | Al | 2 | 20 | 30 | 1.0E-06 | 30 | 0 | 0 | 5.0E-03 | DC | 400 | 00:30 | 00:15:00 | 14.7 | 12.2 | 17.3% | 3.74 | 68 | 012, | 1090 |
| Al | Al_unif | Al | 2 | 20 | 80 | 1.0E-06 | 30 | 0 | 0 | 5.0E-03 | DC | 400 | 00:30 | 01:00:00 | 5.8 | 5.3 | 8.1% | 4.88 | 31 | 011, | 1900 |
| AlSi1% | AlSi1%_fast | AlSi1% | 2 | 20 | 30 | 1.0E-06 | 30 | 0 | 0 | 5.0E-03 | DC | 400 | 00:30 | 00:15:00 | 14.7 | 12.2 | 17.3% | 3.74 | 68 | | 1090 |
| AlSi1% | AlSi1%_unif | AlSi1% | 2 | 20 | 80 | 1.0E-06 | 30 | 0 | 0 | 5.0E-03 | DC | 400 | 00:30 | 01:00:00 | 5.8 | 5.3 | 8.1% | 4.88 | 31 | | 1900 |
| Au | Au_fast | Au | 5 | 20 | 30 | 1.0E-06 | 30 | 0 | 0 | 5.0E-03 | DC | 200 | 00:20 | 00:10:00 | 23.5 | 19.1 | 16.6% | 5.10 | 78 | 014, | 1140 |
| Au | Au_slow | Au | 5 | 20 | 80 | 1.0E-06 | 30 | 0 | 0 | 5.0E-03 | DC | 50 | 00:20 | 00:30:00 | 2.3 | 2.0 | 7.8% | | | | 360 |
| Au | Au_unif | Au | 5 | 20 | 80 | 1.0E-06 | 30 | 0 | 0 | 5.0E-03 | DC | 250 | 00:20 | 00:15:00 | 13.8 | 12.3 | 10.7% | 5.10 | 85 | 013, | 1100 |
| Cr | Cr_fast | Cr | 4 | 20 | 30 | 1.0E-06 | 30 | 0 | 0 | 5.0E-03 | DC | 200 | 00:30 | 00:15:00 | 7.7 | 6.8 | 11.3% | 36.06 | 1963 | 001, 023 | 610 |
| Cr | Cr_unif | Cr | 4 | 20 | 80 | 1.0E-06 | 30 | 0 | 0 | 5.0E-03 | DC | 350 | 00:30 | 00:15:00 | 6.4 | 5.8 | 7.6% | 52.21 | 822 - 1268 | 002, 003, 004 005, 022 | 520 |
| Cu | Cu_fast | Cu | 6 | 20 | 30 | 1.0E-06 | 30 | 0 | 0 | 5.0E-03 | DC | 400 | 00:20 | 00:40:00 | 30.5 | 26.5 | 10.6% | 2.63 | 258 | 007, | 6360 |
| Cu | Cu_unif | Cu | 6 | 20 | 80 | 1.0E-06 | 30 | 0 | 0 | 5.0E-03 | DC | 400 | 00:20 | 00:30:00 | 14.2 | 12.6 | 8.5% | 2.62 | 231 | 006, | 2260 |
| Cu | Cu_slow | Cu | 6 | 20 | 80 | 1.0E-06 | 30 | 0 | 0 | 5.0E-03 | DC | 50 | 00:20 | 00:30:00 | 1.3 | | | | | 053, | 0 |
| Cu3N | Cu3N_unif | Cu_r | 1 | 20 | 80 | 1.0E-06 | 0 | 0 | 30 | 5.0E-03 | DC | 200 | 03:30 | 00:30:00 | 5.0 | 4.6 | 7.2% | | | 048, | 820 |
| FeCoB 60:20:20 at% | FeCoB_slow | FeCoB | 1 | 20 | 80 | 1.0E-06 | 30 | 0 | 0 | 5.0E-03 | RF1 | 100 | 01:00 | 00:30:00 | | | | | | | 0 |
| FeCoB 60:20:20 at% | FeCoB_unif | FeCoB | 1 | 20 | 80 | 1.0E-06 | 30 | 0 | 0 | 5.0E-03 | RF1 | 200 | 01:00 | 00:30:00 | | 0.3 | | | | 049, | 50 |
| Ge | Ge_unif | Ge | 6 | 20 | 80 | 1.0E-06 | 30 | 0 | 0 | 5.0E-03 | DC | 200 | 01:00 | 00:10:00 | | | | | | | 0 |
| IGZO | IGZO_fast | IGZO | 1 | 20 | 30 | 1.0E-06 | 30 | 0 | 0 | 5.0E-03 | RF1 | 200 | 01:00 | 00:10:00 | 6.3 | 5.2 | 16.5% | - | | | 310 |
| IGZO | IGZO_unif | IGZO | 1 | 20 | 80 | 1.0E-06 | 30 | 0 | 0 | 5.0E-03 | RF1 | 200 | 01:00 | 00:20:00 | 2.7 | 2.5 | 8.5% | - | | | 300 |
| IGZO | IGZO(O2)_unif | IGZO | 1 | 20 | 80 | 1.0E-06 | 21 | 9 | 0 | 5.0E-03 | RF1 | 200 | 01:00 | 00:20:00 | | | | - | | | 0 |
| Ir | Ir_fast | Ir | 2 | 20 | 30 | 1.0E-06 | 30 | 0 | 0 | 5.0E-03 | DC | 250 | 01:00 | 00:20:00 | 9.7 | 8.0 | 17.6% | 17.12 | -1750 | 027, | 960 |
| Ir | Ir_unif | Ir | 2 | 20 | 80 | 1.0E-06 | 30 | 0 | 0 | 5.0E-03 | DC | 250 | 01:00 | 00:30:00 | 4.4 | 4.0 | 8.1% | 17.25 | -1926 | 026, | 720 |
| IrOx | IrOx_unif | Ir | 2 | 20 | 80 | 5.0E-06 | 30 | 15 | 0 | 7.5E-03 | DC | 200 | 03:10 | 00:30:00 | 6.9 | 6.5 | 4.4% | 395.00 | -2066 | 028, | 1170 |
| IrOx low stress | IrOx(LS)_unif | Ir | 2 | 20 | 80 | 5.0E-06 | 30 | 15 | 0 | 1.2E-02 | DC | 200 | 03:10 | 00:30:00 | 9.6 | 7.9 | 16.5% | | -489 | 047, | 1420 |
| Mo | Mo_fast | Mo | 6 | 20 | 30 | 1.0E-06 | 30 | 0 | 0 | 5.0E-03 | DC | 400 | 00:30 | 00:30:00 | 15.6 | 13.6 | 11.0% | 13.04 | -448 | 035, | 2440 |
| Mo | Mo_unif | Mo | 6 | 20 | 80 | 1.0E-06 | 30 | 0 | 0 | 5.0E-03 | DC | 400 | 00:30 | 00:30:00 | 7.0 | 6.7 | 4.0% | 14.87 | 470 | 034, | 1200 |
| Ni | Ni_fast | Ni | 1 | 20 | 30 | 1.0E-06 | 30 | 0 | 0 | 5.0E-03 | RF1 | 300 | 01:00 | 00:30:00 | 9.8 | 8.1 | 16.7% | 10.78 | 201 | 016, | 1450 |

| Film | Step | Target | cath # | T° [°C] | Z PS [mm] | Wait Press. [mbar] | Ar [sccm] | O ₂ [sccm] | N ₂ [sccm] | Press. [mbar] | Source | Power [W] | Target clean [min:ss] | Max duration [hh:min:ss] | Dep. Rate [A.s ⁻¹] @center | Dep. Rate [A.s ⁻¹] average | Uniformity [%] Ø80mm | Resistivity [μΩ.cm] | Stress [MPa] | Référence | Max Thick [nm] | |
|-------------------|--------------|--------|--------|---------|-----------|--------------------|-----------|-----------------------|-----------------------|---------------|--------|-----------|-----------------------|--------------------------|--|--|----------------------|---------------------|--------------|-----------|----------------|---|
| Ni | Ni_slow | Ni | 1 | 20 | 80 | 1.0E-06 | 30 | 0 | 0 | 5.0E-03 | RF1 | 50 | 01:00 | 00:30:00 | | | | | | | 0 | |
| Ni | Ni_unif | Ni | 1 | 20 | 80 | 1.0E-06 | 30 | 0 | 0 | 5.0E-03 | RF1 | 300 | 01:00 | 00:30:00 | 4.3 | 3.8 | 9.9% | 10.11 | 398 | 015, | 680 | |
| NiCu | NiCu_unif | NiCu | 1 | 20 | 80 | 1.0E-06 | 30 | 0 | 0 | 5.0E-03 | RF1 | 300 | 01:00 | 00:30:00 | | | | | | | | 0 |
| NiCuOx | NiCuOx_unif | NiCu | 1 | 20 | 80 | 5.0E-06 | 30 | 15 | 0 | 7.5E-03 | RF1 | 300 | 03:10 | 00:30:00 | | | | | | | | 0 |
| Pd | Pd_fast | Pd | 2 | 20 | 30 | 1.0E-06 | 30 | 0 | 0 | 5.0E-03 | DC | 200 | 00:20 | 00:20:00 | 18.8 | 16.6 | 11.3% | 14.22 | -47 | 033, | 1990 | |
| Pd | Pd_unif | Pd | 2 | 20 | 80 | 1.0E-06 | 30 | 0 | 0 | 5.0E-03 | DC | 250 | 00:20 | 00:30:00 | 10.5 | 9.9 | 6.4% | 14.84 | -37 | 032, | 1780 | |
| Pt | Pt_fast | Pt | 6 | 20 | 30 | 1.0E-06 | 30 | 0 | 0 | 5.0E-03 | DC | 200 | 00:20 | 00:20:00 | 13.3 | 10.8 | 16.9% | 17.36 | -423 | 018, | 1290 | |
| Pt | Pt_unif | Pt | 6 | 20 | 80 | 1.0E-06 | 30 | 0 | 0 | 5.0E-03 | DC | 250 | 00:20 | 00:30:00 | 7.3 | 6.7 | 7.2% | 17.33 | -463 | 017, | 1200 | |
| Si | Si_unif | Si | 6 | 20 | 80 | 1.0E-06 | 30 | 0 | 0 | 5.0E-03 | DC | 200 | 00:30 | 01:00:00 | 2.0 | 1.8 | 9.3% | | 52 | 019, | 640 | |
| Sb | Sb_fast | Sb | 6 | 20 | 30 | 1.0E-06 | 30 | 0 | 0 | 5.0E-03 | DC | 250 | 00:30 | 00:10:00 | 59.8 | 53.6 | 11.5% | | | 051, | 3210 | |
| Sb | Sb_slow | Sb | 6 | 20 | 80 | 1.0E-06 | 30 | 0 | 0 | 5.0E-03 | DC | 50 | 00:30 | 00:30:00 | 3.3 | 3.0 | | | | 052, | 540 | |
| Sb | Sb_unif | Sb | 6 | 20 | 80 | 1.0E-06 | 30 | 0 | 0 | 5.0E-03 | DC | 250 | 00:30 | 00:15:00 | 27.3 | 25.7 | 6.1% | | | 050, | 2310 | |
| Sn | Sn_fast | Sn | 6 | 20 | 30 | 1.0E-06 | 30 | 0 | 0 | 5.0E-03 | DC | 250 | 00:30 | 00:10:00 | 58.7 | 52.6 | 7.9% | 21.97 | 9 | 043, | 3150 | |
| Sn | Sn_slow | Sn | 6 | 20 | 80 | 1.0E-06 | 30 | 0 | 0 | 5.0E-03 | DC | 50 | 00:30 | 00:30:00 | | | | | | | | 0 |
| Sn | Sn_unif | Sn | 3 or 6 | 20 | 80 | 1.0E-06 | 30 | 0 | 0 | 5.0E-03 | DC | 250 | 00:30 | 00:15:00 | 36.9 | 34.7 | 8.0% | 102.20 | -33 | 042, | 3120 | |
| Ta | Ta_fast | Ta | 3 | 20 | 30 | 1.0E-06 | 30 | 0 | 0 | 5.0E-03 | DC | 200 | 00:30 | 00:30:00 | 6.3 | 5.8 | 10.3% | 177 - 22 | -1714 | 009, 030 | 1040 | |
| Ta | Ta_unif | Ta | 3 | 20 | 80 | 1.0E-06 | 30 | 0 | 0 | 5.0E-03 | DC | 200 | 00:30 | 01:00:00 | 3.0 | 2.9 | 7.9% | 177 - 45 | -1506 | 008, 029 | 1040 | |
| Ta | Ta(LS)_unif | Ta | 3 | 20 | 80 | 1.0E-06 | 30 | 0 | 0 | 5.0E-02 | DC | 200 | 00:30 | 01:00:00 | 5.8 | 5.2 | 8.7% | 172 | -35 / -94 | 010, 031 | 1870 | |
| TaN | TaN_unif | TaN | 1 | 20 | 80 | 1.0E-06 | 30 | 0 | 0 | 5.0E-03 | RF1 | 200 | 00:30 | 00:30:00 | 1.33 | 1.23 | 6.5% | - | | | 220 | |
| Ti | Ti_fast | Ti | 3 | 20 | 30 | 1.0E-06 | 30 | 0 | 0 | 5.0E-03 | DC | 400 | 00:30 | 00:30:00 | 7.0 | 6.2 | 9.2% | 62.40 | -660 | 021, | 1110 | |
| Ti | Ti_unif | Ti | 3 | 20 | 80 | 1.0E-06 | 30 | 0 | 0 | 5.0E-03 | DC | 400 | 00:30 | 01:00:00 | 3.4 | 3.1 | 6.4% | 79.73 | -103 | 020, | 1110 | |
| TiN | TiN_fast | TiN | 1 | 20 | 30 | 1.0E-06 | 30 | 0 | 0 | 5.0E-03 | RF1 | 200 | 01:00 | 00:30:00 | 2.19 | 1.96 | 9.0% | 237.00 | | | 350 | |
| TiN | TiN_unif | TiN | 1 | 20 | 80 | 1.0E-06 | 30 | 0 | 0 | 5.0E-03 | RF1 | 200 | 01:00 | 00:30:00 | 1.50 | 1.45 | 2.5% | 1740.00 | | | 260 | |
| TiN | TiN(N2)_unif | TiN | 1 | 20 | 80 | 1.0E-06 | 30 | 0 | 5 | 5.0E-03 | RF1 | 200 | 01:00 | 00:30:00 | | | | | | | 0 | |
| TiO2 | TiO2_fast | TiO2 | 1 | 20 | 30 | 1.0E-06 | 30 | 0 | 0 | 5.0E-03 | RF1 | 200 | 01:00 | 00:12:30 | 1.55 | 1.35 | 11.0% | - | | | 100 | |
| TiO2 | TiO2_unif | TiO2 | 1 or 2 | 20 | 80 | 1.0E-06 | 30 | 0 | 0 | 5.0E-03 | RF1 | 200 | 01:00 | 00:25:00 | 0.71 | 0.66 | 5.8% | - | | | 90 | |
| W | W_fast | W | 6 | 20 | 30 | 1.0E-06 | 30 | 0 | 0 | 5.0E-03 | DC | 250 | 00:30 | 00:20:00 | 7.8 | 6.8 | 11.3% | 17.27 | -2596 | 037, | 810 | |
| W | W_unif | W | 6 | 20 | 80 | 1.0E-06 | 30 | 0 | 0 | 5.0E-03 | DC | 250 | 00:30 | 00:45:00 | 3.5 | 3.3 | 5.6% | 17.13 | -2206 | 036, | 890 | |
| W low stress | W(LS)_unif | W | 6 | 20 | 80 | 1.0E-06 | 30 | 0 | 0 | 1.0E-02 | DC | 250 | 00:30 | 00:45:00 | 3.9 | 3.6 | 9.9% | 20.73 | -1327 | 046, | 970 | |
| WOx | WOx_unif | W | 6 | 20 | 80 | 1.0E-06 | 30 | 9 | 0 | 7.5E-03 | DC | 200 | 03:10 | 00:30:00 | 5.6 | 5.1 | 8.1% | | -166 | 044, 045 | 910 | |
| WTi10% | WTi10%_fast | WTi10% | 2 | 20 | 30 | 1.0E-06 | 30 | 0 | 0 | 5.0E-03 | DC | 250 | 00:30 | 00:20:00 | 7.9 | 7.0 | 9.9% | 67.58 | -2171 | 039, | 840 | |
| WTi10% | WTi10%_unif | WTi10% | 2 | 20 | 80 | 1.0E-06 | 30 | 0 | 0 | 5.0E-03 | DC | 250 | 00:30 | 00:30:00 | 3.6 | 3.4 | 5.4% | 67.11 | -2283 | 038, | 610 | |
| WTi10% low stress | WTi10%(LS)_f | WTi10% | 2 | 20 | 30 | 1.0E-06 | 30 | 0 | 0 | 5.0E-02 | DC | 250 | 00:30 | 00:20:00 | 13.1 | 11.7 | 9.6% | 270.09 | 96 | 041, | 1400 | |
| WTi10% low stress | WTi10%(LS)_u | WTi10% | 2 | 20 | 80 | 1.0E-06 | 30 | 0 | 0 | 5.0E-02 | DC | 250 | 00:30 | 00:30:00 | 7.2 | 6.6 | 7.8% | 201.00 | -69 | 040, | 1180 | |