元素	熔點℃	密度 gm/cm^3	Boat/Crucible	應用 /(operation) note
Ag	961	10.5	W, Ta, Mo, Al_2O_3	Highest reflectance mirrors visible to IR.
Al	660	2.7	Bn-TiB_2, W	Conductive lines. Front surfaced mirrors, reflectors
AlF_3	1257 sublimes	2.9	W, Mo, Ta	Not affected by water. Good mechanical strength
Al_2O_3	2015	3.96	W	Al mirror protection. UV laser ARC and high reflectors.
AZOY 2/98 wt%	1975	5.66		Transparent conductive film
Au	1063	19.3	W, Mo	Contact layer. High reflecting films for front surface mirror in IR laser system.
B	2180	2.35		(carbide with crucible, cool slow)
Ba	714	3.58	W, Mo, Ta	(wets without alloying, reacts with ceramic)
BaF_2	1280	4.89	W, Mo, Ta	
BaO	1923	5.72	Pt	
Be	1278	1.85	W, Mo, Ta	(Toxic) Semiconductor junctions.(Wets W. Mo. Ta)
Bi_2O_3	820	8.9	Pt, Mo	(Vaportoxic) Beam splitter
Bo_2Te_3	585	7.9	W, Mo	Magneto-optic film.(by co-evaporation)
Ca	850	1.55	W	Corrodes in air
CaF_2	1403	3.18	Mo, Ta, W	Low index UV-IR. Anti-Reflection Coating on glass
CdS	1477	4.82	Mo, W	(aperture cover required)

CeF_3	1460	6.16	W, Mo, TA	(preheat to outgas)
元素	熔點℃	密度 gm/cm^3	Boat/Crucible	應用 /(operation) note
CeO_2	2600	7.13	W	
Co	1492	8.9	W/Al_2O_3, W	Ferromagnetic thin film. (alloys with refractories)
Cr	1890	7.19	W, Cr	Beam splitting film. Mirrors. Adhesion film on glass for printed circuits
Cr2O3	2435	5.2	W	hard binding layer. (Decompoae to lower oxided, reoxided @100℃)
Cr-SiO			W	Resistor films (by flash evaporation)
Cu	1083	8.93	W, Mo, Ta	IR reflector. Contacts
Fe	1536	7.87	W	Photo mask. (attacks W)
Ga	30	5.9		(alloys with refractories)
GaN	800 sublimes	6.1		(evaporate Ga in 10-3 N2)
Ge	958	5.32	W, Mo, Ta	High index film in IR fiters.
GeO2	1086	6.2	Mo, Ta, W	Dielectric, protective film
Hf	2230	13.28		
HfO2	2812	9.68	W	IR mirror overcoat, UV laser multilayers, emitter wire coating. (high damage threshold 0.35μ)
In	156	7.31	W, Mo	Transistor contacts. Solder joints.(wets Wand Cu, Ta or Mo liner required)
ITO(90/10 wt%)	~1900	1.17	W, Pt	Tranparent conductive film.
La	920	6.17	Ta	(Films burn in air if scrape)

LaF3	1490	5.94	Mo, Ta	(preheat to outgas)
元素	熔點℃	密度 gm/cm^3	Boat/Crucible	應用 /(operation) note
LiF	845	2.6	Ta, Mo, W	(preheat to outgas)
Mg	650	1.74	W, Mo, Ta	Diffusion with Bi on glass to form ferromagnetic film.
MgF2	1261	3.2	W, Mo, Ta	ARC multiayers. (reacts with W)
MgO	2852	3.58	W	Insulator. High Temp. dielectric.
Mn	1245	7.43	W, Mo, Ta	Semiconductor contacts. Adhesion film.
Mo	2610	10.22		Semiconductor contacts. Hard, somooth film
Nb	2468	8.57		Anodic film for rectification.
Ni	1453	8.91	W/Al2O3, W	Durable mirrors. Adhesion layer.(alloy with refractories)
NiCr(80/20 wt%)	1450	8.4	W, Ta	Thin film resistor. Good adhesion on non-metals.(alloy with refractories)
Pb	328	11.34	W, Ta, Mo	(Toxic, rate control important)
PbF2	855	8.24	W, Pt, Ta	(Toxic)Dielectric interference filter for UV
Pd	1552	12.02	W	(alloy with refractiories, fine wire-rapid evaporationsuggested)
Pr2O3	2200	7.07	W	wide-band Vis AR coating (Reactive to radio frequency)
Pt	1769	21.45	W	(alloy with metal. liner, fine wire will self evaporate)