Evaporation Sources and E-Beam Materials

Our sources, pellets, and wire are made from high-purity elemental metals. We can custom-alloy just about any combination of elements to make evaporation pieces, regardless of the material malleability. Some of our more popular materials include:

- 1. aluminum lithium and aluminum silver (all ratios)
- 2. gold-beryllium (all ratios)
- 3. pure gold and pure platinum (ultra-high purity)
- 4. nickel-iron-cobalt alloys (any combination)
- 5. cerium-gadolinium
- 6. yttrium and zirconium yttrium.

We arc-cast our element and alloy slugs in our own vacuum-arc melters, using an inert-gas atmosphere and cold-copper crucibles. Materials are then individually cast, extruded, rolled and cut. etc.

Some materials have to be hot-pressed: oxides, pure boron, etc., which we also provide.

The targets are then cut or machined to within the tolerances of the customer's sputtering system. We have a full machine shop with lathes, mills, and grinders.

Finally, our targets are vacuum-sealed and shipped to the customer, usually as soon as they are finished. We have quick turn-around times because we specialize in the research and development market.



Titanium 99.995% Vanadium 99.8%

EVAPORATION MATERIALS

Our sources, pellets, and wire are made from high-purity elemental metals. We can custom-alloy just about any combination of elements to make evaporation pieces, regardless of the material malleability. Some of our more popular materials include:

- 1. aluminum-lithium and aluminum-silver (all ratios)
- 2. gold-beryllium, gold-tin and gold-zinc (all ratios)
- 3. ultra-high purity 99.999% gold, 99.999% platinum, and 99.999% silver
- 4. barium and calcium
- 5. chromium and chromium alloys
- 6. copper-nickel, aluminum-silicon-copper
- 7. dysprosium, erbium, europium, and other lanthanides
- 8. iron and iron alloys
- 9. magnesium and silver-magnesium

- 10. molybdenum and molybdenum alloys
- 11. nickel and nickel alloys (nickel-chrome, nickel-manganese-gallium, etc)
- 12. osmium
- 13. rhenium
- 14. ruthenium
- 15. titanium and titanium alloys
- 16. tungsten and ti-tungsten

We arc-cast our element and alloy slugs in our own vacuum-arc melters, using an inert-gas atmosphere and cold-copper crucibles. Materials are then individually cast, extruded, rolled and cut. etc.

We can also provide hot-pressed ceramics: oxides, pure boron, etc.

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Custom Alloy History

High Purity Materials Manufactured at ACI Alloys 1998-Present

Sputtering target, foil, PVD targets, magnetron targets, cathodic arc target, laser ablation targets, thermal evaporation material, e-beam evaporation material, and master alloys.

Here is a list of some of the alloys we have made in the past 20 years:

A

Silver sputtering targets

Aq

Ag epoxy

Ag paste

Silver Aluminum sputtering targets

Ag/Al 50:50 at%

Ag/Al 70/30 at%

Ag/Al 92/8 wt%

Ag/Al 94/6 wt%

Ag/AI 95/5 wt%

Ag/AI 97/3 wt%

Aq/Al 98.7/1.3 wt%

Aq/Al 99.7/0.3 at% Ag/Al/Cu 93/1.5/5.5 wt% Gold-Silver sputtering targets Ag/Au 50/50 wt% Ag/Au 56.1/43.9 wt% Ag/Au 60.3/39.7 wt% Ag/Au 65/35 at% Ag/Au 70/30 at% Ag/Au 75/25 at% Ag/Au 75/25 at% Ag/Au 80/20 at% Ag/Au 85/15 at% Ag/Au 90:10 at% Ag/Au 95/5 wt% Ag/Au 96/4 wt% Ag/Au/Co/Cu/Zn 56/37/4/2/1 wt% Ag/B 99.5/0.5 at% Ag/B 99/1 at% Ag/Ca 92/8 wt% Ag/Ca 98.1/1.9 wt% Aa/Cd 90/10 wt% Silver-copper sputtering targets Ag/Cu 66.6/33.3 at% Aq/Cu 72/28 wt% Ag/Cu 90/10 wt% Ag/Cu 92.5/7.5 wt% Ag/Cu 93.5/6.5 wt% Ag/Cu 97/3 wt% Ag/Cu 99/1 wt% Ag/Cu/In/Ti 59/27.3/12.5/1.2 wt% Ag/Cu/Pd 98.1/1/0.9 wt% Ag/Cu/Ti 63/35.25/1.75 wt% Ag/Cu/Ti 68.8/26.7/4.5 Ag/Ge 66.6/33.3 at% Ag/Ge/Cu 93/4/3 wt% Ag/In 50/50 at% Ag/In/Te2 Ag/In/Y/W/Pd 2/12/2/4/80 wt% Ag/La 98/2 wt% Ag/Li 96/4 wt% Ag/Li 98/2 wt% Ag/Li 99.7/0.3 wt% Ag/Li/Cu/Pd 95.1/3/1/0.9 wt% Ag/Lu 98/2 wt% Ag/Mg 10/1 wt% Ag/Mg 90/10 wt% Ag/Mg 91/9 wt% Ag/Mg 95/5 at% Ag/Mg 97.5/2.5 wt% Ag/Mg 97.6/2.4 wt% Ag/Mg 98.3/1.7 wt% Ag/Mg 98.3/1.7 wt% Ag/Mg 98.8/1.2 wt%

Ag/Nd/Cu 99.1/0.5/0.4 wt%

Aq/Ni 90/10 wt% Ag/Ni 95/5 wt% Ag/Ni 97/3 wt% Ag/Ni 99.5/0.5 wt% Ag/Ni 99/1 wt% Ag/Ni/Cu 90/7/3 wt% Ag/Ni/Pd 94/3/3 wt% Ag/Ni/Pd 98/1/1 wt% Aa/Pb 34.2/65.8 wt% Ag/Pb/Te Ag/Pd 75/25 wt% Ag/Pd 77/23 wt% Aq/Pd 80/20 Ag/Pd 90/10 wt% Aq/Pd 95.1/4.9 wt% Ag/Pd 95.1/4.9 wt% Ag/Pd 95/5 wt% Ag/Pd 97/3 wt% Ag/Pd 99/1 wt% Ag/Pd/Cu 98.6/0.9/0.5 wt% Aa/Pd/Cu 98/0.9/1.1 wt% Ag/Pd/Cu 98/1/1 wt% Aq/Pd/Ni 20/20/60 Ag/Pt 60/40 at% Ag/Pt 75/25 at% Ag/Pt 95/5 wt% Ag/Pt 98/2 wt% Ag/Sb/Te 1:1:2 at% Ag/Sb/Te 25/25/50 at% Ag/Sb/Te/Ge 3.3/3.8/62/30.9 wt% Ag/Sc 1/1 at% Aa/Sc 98/2 wt% Ag/Si 97/3 wt% Ag/Si/Cu 93/1.5/5.5 wt% Ag/Sm 80/20 at% Ag/Sm 90/10 at% Ag/Sm 95/5 at% Ag/Sm 95/5 at% Ag/Sm 98/2 at% Ag/Sm 98/2 at% Ag/Sm 99.5/0.5 at% Ag/Sm 99.8/0.2 at% Ag/Sm 99.9/0.1 wt% Ag/Sm 99/1 at% Ag/Sn 80/20 wt% Ag/Sn/Lu 94.1/3.4/2.5 wt% Aq/Ti 10/90 at% Ag/Ti 15/85 at% Ag/Ti 90/10 wt% Ag/Ti 99.5/0.5 wt% Aq/Ti 99.6/0.4 wt% Ag/V 70/30 at% Ag/Zn 79.4/20.6 wt% Ag/Zn 80/20 wt%

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Ag/Zn 80/20 wt%
Aq/Zn 96.9/3.1 wt%
Ag/Zn 99.5/0.5 wt%
Ag2S
Aq3Sb
AgPbTe
AgSbTe2
Al alloy 6061
Al alloy 7064
Al alloy 7475
Al w/ 5000ppm of Eu
Al with 3000ppm Mn
aluminum-silver sputtering targets, aluminum-silver e-beam pellets
Al/Ag 50/50 at%
Al/Ag 78/22 at%
Al/Ag 85/15 wt%
Al/Ag 90/10 at%
Al/Ag 90/10 wt%
Al/Ag 94/6 at%
Al/Ag 95/5 wt%
Al/Ag 95/5 wt%
Al/Ag 97/3 at%
Al/Au 75/25 at%
Al/Au 80/20 at%
Al/Au 85/15 at%
Al/Au 85/15 wt%
AI/B 4:1 at%
AI/B 60/40 at%
AI/B 70/30 at%
AI/B 75/25 at%
AI/B 80/20 at%
AI/B 85/15 at%
AI/B 90/10 at%
AI/B 95/5 at%
AI/B/Si 98/1/1 wt%
Al/Ba/Eu 15/76.2/8.8 wt%
Al/Ba/Eu 39.5/54.8/5.7 wt%
Al/Ba/Eu 69/29/3 at%
Al/Ba/Eu 74/24/2 at%
Al/Be
AI/Cd 99/1 at%
Al/Ce 99/1 at%
Al/Co 50/50 at%
Al/Co 51.7/48.3 wt%
Al/Co 57.9/42.1 wt%
Al/Co 82/18 at%
AI/Co 85/15 at%
AI/Co 97.8/2.2 wt%
Al/Co 98.9/1.1 wt%
AI/Cr 25/75 wt%
AI/Cr 70/30 wt%
Al/Cr 75/25 wt%
Al/Cr 82.4/17.6 wt%
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Al/Cr 85.7/14.3 wt% Al/Cr 86/14 at% Al/Cr 88/12 at% Al/Cr 89.1/10.9 wt% Al/Cr 90/10 at% Al/Cr 92.6/7.4 wt% Al/Cr 92/8 at% Al/Cr 94.4/5.6 wt% Al/Cr 94/6 at% AI/Cr 95/5 at% Al/Cr 96.2/3.8 wt% Al/Cr 96/4 at% AI/Cr 97/3 at% Al/Cr 98.1/1.9 wt% AI/Cr 98/2 at% AI/Cr 99/1 at% Al/Cr/Cu 92.98/3.73/2.28 wt% Al/Cu 1:1 at% Al/Cu 25/75 wt% Al/Cu 29.8/70.2 wt% Al/Cu 33.6/66.3 vol% Al/Cu 45.9/54.1 wt% Al/Cu 45.9/54.1 wt% Al/Cu 50/50 at% Al/Cu 50/50 wt% Al/Cu 60/40 wt% Al/Cu 66.3/33.4 vol% AI/Cu 70/30 wt% Al/Cu 79.3/20.7t% Al/Cu 80/20 wt% Al/Cu 89/11 wt% Al/Cu 90/10 at% Al/Cu 90/10 wt% AI/Cu 92/8 wt% Al/Cu 94.5/4.5 at% AI/Cu 94/6 wt% Al/Cu 95/5 at% Al/Cu 96.5/3.5 wt% Al/Cu 96/4 wt% Al/Cu 97.67/2.32 wt% Al/Cu 97.7/2.3 wt% Al/Cu 97.9/2.1 wt% Al/Cu 98.5/1.5 wt% Al/Cu 98.8/1.2 wt% AI/Cu 98/2 wt% Al/Cu 99.5/0.5 wt% Al/Cu 99.7/0.3 at% Al/Cu 99/1 at% AI/Cu 99/1 wt% Al/Cu/Mg 38.1/44.8/17.1 wt% Al/Cu/Mg 38/45/17 wt% Al/Cu/Si 95.5/4/0.5 wt% Al/Cu/Ti 94.26/2.28/3.45 wt% Al/Dy 21.7/78.3 wt%

Al/Er 21.2/78.8 wt% Al/Er 91.4/8.4 wt% Al/Er 97/3 at% Al/Er 99.5/0.5 wt% Al/Er 99/1 at% Al/Fe 1:1 at% Al/Fe 10.8/89.2 wt% Al/Fe 24.4/75.6 wt% Al/Fe 32.6/67.4 wt% Al/Fe 37.1/62.9 wt% Al/Fe 42/58 wt% Al/Fe 42/58 wt% Al/Fe 70/30 wt% AI/Fe 80/20 wt% Al/Fe 90.2/9.8 wt% Al/Fe 90/10 wt% Al/Fe 90/10 wt% Al/Fe 92/8 wt% Al/Fe 94/6 wt% AI/Fe 94/6 wt% AI/Fe 95/5 wt% Al/Fe wt% Al/Fe wt% Al/Fe/Mo 92/5/3 at% Al/Fe/Mo 92/5/3 at% Al/Ga 93/7 Al/Gd 96.6/3.4 wt% AI/Ge 49.4/51.63 wt% Al/Ge 49.4/51.63 wt% AI/Hf 37.7/62.3 wt% AI/Hf 57.6/42.4 wt% AI/Hf 9.2/90.8 wt% AI/Hf 90/10 at% Al/In 50/50 at% Al/In 90/10 at% Al/In 90/10 wt% Al/In 95/5 at% Al/In 95/5 wt% Al/In/Sn 90/5/5 at% Al/Ir 68.7/31.3 wt% Al/Ir 77.1/22.9 wt% Al/Ir 87.3/12.7 wt% AI/K 9:1 at% Al/La 63.6/36.4 wt% aluminum-lithium sputtering targets, aluminum-lithium e-beam pellets Al/Li (99.0/1.0 at%) 99.74/0.26 wt% Al/Li 25/0.075 wt% Al/Li 3/.07 wt% Al/Li 4/0.06 wt% Al/Li 5/0.05 wt%

Al/Li 50/50 at% Al/Li 79.5/20.5 wt% Al/Li 80/20 wt% Al/Li 90/10 at%

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Al/Li 95/5 at%
Al/Li 95/5 wt%
Al/Li 96/4 wt%
Al/Li 97.8/2.2 wt%
Al/Li 97/3 at%
Al/Li 98.7/1.3 wt%
Al/Li 98/2 wt%
Al/Li 99.25/0.75 wt%
Al/Li 99.4/0.6 wt%
Al/Li 99.5/0.5 wt%
Al/Li 99.7/0.3 wt%
Al/Li 99.74/0.26 at%
Al/Li 99.74/0.26 wt%
Al/Li 99.8/0.2 wt%
Al/Li 99.85/0.15 wt%
Al/Li 99.875/0.125 wt%
Al/Li 99.9/0.1 wt%
Al/Li 99.95/0.05 wt%
Al/Li 99/1 wt%
aluminum-magnesium sputtering targets
AI/Mg 25/75 at%
Al/Mg 32.2/67.8 wt%
AI/Mg 42.5/57.5 wt%
AI/Mg 5.5/94.5 wt%
Al/Mg 50/50 at%
AI/Mg 52.6/47.4 wt%
AI/Mg 62.5/37.5 wt%
AI/Mg 70/30 wt%
AI/Mg 72.2/27.8 wt%
AI/Mg 81.6/18.4 wt%
Al/Mg 90.9/9.1 wt%
AI/Mg 95.5/4.5 wt%
AI/Mg 95/5 wt%
Al/Mg 96/4 at%
Al/Mg 96/4 wt%
AI/Mg 97.5/2.5 wt%
Al/Mg 97/3 at%
AI/Mg 97/3 wt%
AI/Mg 99.5/0.5 wt%
Al/Mg 99/1 at%
Al/Mg 99/1 wt%
Al/Mg/Cu/Fe/Zr/Si 60.5/0.5/1/5/3/20
Al/Mg/Cu/Ni/Fe/Si 90/1.5/2.4/1.0/1.0/0.2
AI/Mg/Li/Zr/Sc
Al/Mg/Mn/Cr 94.6/5.2/0.1 wt%
Al/Mg/Si 97.4/0.9/0.7 wt%
Al/Mg/Si 98.9/0.7/0.4 wt%
Al/Mg/Zr/Sc 91/6/1/2 wt%
aluminum-manganese sputtering targets
Al/Mn (3000ppm Mn)
Al/Mn 1:1 at%
Al/Mn 1000ppm Mn at%
Al/Mn 1100ppm Mn at%
Al/Mn 1200ppm Mn at%
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Al/Mn 2000ppm Mn at%
Al/Mn 2100ppm Mn at%
Al/Mn 2200ppm Mn at%
Al/Mn 2300ppm Mn at%
Al/Mn 2400ppm Mn at%
Al/Mn 2500ppm Mn at%
Al/Mn 33/67 wt%
Al/Mn 42.4/57.6 wt%
Al/Mn 80/20 at%
Al/Mn 800ppm Mn at%
Al/Mn 88:12 at%
Al/Mn 900ppm Mn at%
Al/Mn 91:9 at%
Al/Mn 94:6 at%
Al/Mn 97:3 at%
Al/Mn 98/2
Al/Mn 99.4/0.6 wt%
Al/Mn 99.6/0.4 wt%
Al/Mn 99.7/0.3 at%
Al/Mn 99.815/0.185 at%
AI/Mn 99/1 wt%
Al/Na 90/10 at%
aluminum-neodymium sputtering targets
AI/Nd 78/22 wt%
Al/Nd 81.8/18.2 wt%
Al/Nd 90.16/9.84 wt%
Al/Nd 90.16/9.84 wt% wt%
AI/Nd 90.2/9.8 wt%
Al/Nd 90/10 at%
Al/Nd 95/5 at%
Al/Nd 96/4 at%
AI/Nd 97/3 at%
AI/Nd 98/2 at%
AI/Nd 98/2 wt%
AI/Nd 99/1 at%
aluminum-nickel sputtering targets
Al/Ni 16.5/83.5 wt%
Al/Ni 22.3/77.7 wt%
AI/Ni 23.5/76.5 wt%
Al/Ni 26.1/73.9 wt%
AI/Ni 31.5/68.5 wt%
Al/Ni 40.8/59.2 wt%
Al/Ni 50/50 at%
Al/Ni 50/50 wt%
Al/Ni 51.7/48.3 wt%
Al/Ni 58/42 wt%
AI/Ni 80/20 wt%
Al/Ni 82.1/17.9 wt%
Al/Ni 90.2/9.8 wt%
Al/Ni 90/10 wt%
Al/Ni 95:5 at%
Al/Ni/Co/Cr/Fe/Ti 8/14/38/3/28/8
Al/Ni/Ir 50/40/10 at%
Al/Ni/Mn 36.7/33.4/29.9 wt%
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Al/Ni/Mn 36.7/33.4/29.9 wt% Al/Ni/Os 50/40/10 at% Al/Ru 80.6/19.4 wt% Al/Ru 86.5/13.5 wt% Al/Ru 92.9/7.1 wt% aluminum-scandium sputtering targets Al/Sc 95/5 wt% aluminum-silicon sputtering targets Al/Si 49/51 wt% Al/Si 56/44 at% Al/Si 6/94 at% Al/Si 60/40 wt% Al/Si 66.7/33.3 at% Al/Si 68.8/31.2 wt% Al/Si 70/30 at% Al/Si 70/30 wt% Al/Si 75/25 wt% Al/Si 78.5/21.5 wt% Al/Si 80/20 wt% Al/Si 88.3/11.7 wt% Al/Si 89.6/10.4 wt% Al/Si 89/11 at% Al/Si 90/10 wt% Al/Si 91.7/8.3 wt% Al/Si 93.8/6.2 wt% Al/Si 94.8/5.2 wt% Al/Si 95.8/4.2 wt% Al/Si 95/5 at% Al/Si 95/5 wt% Al/Si 96/4 at% Al/Si 97.9/2.1 wt% Al/Si 97/3 at% Al/Si 97/3 wt% Al/Si 98.5/1.5 wt% Al/Si 98/2 at% Al/Si 98/2 wt% Al/Si 99.5/0.5 wt% Al/Si 99.9/0.1 wt% 5N Al/Si 99/1 at% Al/Si 99/1 wt% Al/Si/B/Eu 65/35/4/1 wt% Al/Si/Cu 95/1/4 wt% Al/Si/Cu 97/1/2 wt% Al/Si/Cu 98.5/1/0.5 wt% Al/Si/Cu 98/1/1 wt% Al/Si/Ti 98.6/1.2/0.15 wt% Al/Si/Ti 98/1/1/ wt% AI/Ta 50/50 at% AI/Ta 60/40 at% aluminum-titanium sputtering targets AI/Ti 10/90 wt% AI/Ti 2/1 at% AI/Ti 36/64 wt%

Al/Ti 45.8/54.2 wt%

AI/Ti 50/50 at% AI/Ti 50/50 wt% AI/Ti 60/40 wt% Al/Ti 66.6/33.4 at% Al/Ti 70/30 at% AI/Ti 70/30 wt% AI/Ti 79/21 wt% Al/Ti 80/20 wt% AI/Ti 83.5/16.5 wt% AI/Ti 85/15 at% AI/Ti 86:14 at% AI/Ti 90/10 wt% AI/Ti 95/5 at% AI/Ti 95/5 wt% AI/Ti 96.5/3.5 wt% Al/Ti 98.2/1.8 wt% AI/Ti 98/2 at% AI/Ti/Cr 51/37/12 wt% AI/Ti/Si 98.7/0.3/1 at% Al/Ti/Si 98/1/1 at% Al/Ti/Si 99.2/0.3/.5 at% AI/V 34.6/65.4 wt% AI/V 50/50 at% AI/V/Fe/Si 89/1.5/8/1.5 wt% AI/Y 65/35 at% Al/Y 90.8/9.2 wt% Al/Yb 31.9/68.1 wt% aluminum-zinc sputtering targets Al/Zn 2/98 wt% Al/Zn 3/97 wt% AI/Zn 90/10 wt% Al/Zn 95/5 at% AI/Zn 95/5 wt% Al/Zn 97/3 at% Al/Zn 99.9/0.1 wt% Al/Zn 99.95/0.05 at% Al/Zn 99/1 at% aluminum-zirconium sputtering targets Al/Zr 11.3/88.2 wt% Al/Zr 22.8/77.2 wt% Al/Zr 3.2/96.8 wt% AI/Zr 50/50 at% AI/Zr 50/50 wt% Al/Zr 54.2/45.8 wt% Al/Zr 72.7/27.3 wt% Al/Zr 8:2 at% Al/Zr 80/20 at% Al/Zr 90/10 at% Al/Zr 90/10 wt% Al/Zr 99.11/8.9 at% Al/Zr 99/1 at% Al203/ZnO 2% Al2Nd

Aluminum oxide sputtering targets, alumina sputtering targets

Al2O3 Al2O3/ZnO 1.5/98.5 wt% Al3Li Al3Sc Al3Zr Al4Ba/Eu 98/2 at% AIC AICu 80/20 at% AICu 85/15 at% AICu 90/10 at% AIF3 AIN AITiSi 47/45/8 99.995% AITiSi 49/47/4 **Alumel** AIZr 84.9/15.1 wt% Au Au doped with Er gold-silver sputtering targets Au/Ag /0.1 wt% Au/Ag 50/50 at% Au/Ag 75/25 at% Au/Ag 80/20 wt% Au/Aq 99.9/0.1 wt% Au/Al 1:2 at% Au/AI 50:50 at% Au/Al 81:19 at% Au/Al2 Au/B 6:4 at% Au/B 60:40 at% gold-beryllium sputtering targets Au/Be 88/12 wt% Au/Be 92/8 wt% Au/Be 95/5 wt% Au/Be 98/2 wt% Au/Be 99/1 wt% Au/Cd 90/10 wt% Au/Co 95/5 Au/Co 99/1 wt% Au/Cr 99.46/0.54 wt% Au/Cr 99.5/0.5 wt% Au/Cr 99/1 wt% Au/Cu 25/75 at% Au/Cu 60/40 wt% Au/Cu 98/2 wt% Au/Dy 80/20 wt% Au/Ga 99/1 wt% Au/Ga 99/1 wt% gold-germanium e-beam pellets Au/Ge 12/88 wt% Au/Ge 80/20 wt% Au/Ge 88/12 wt% Au/Ge/Ni 50/33/17 vol% Au/Ge/Ni 74.8/13.5/11.7 wt%

Au/Ge/Ni 83/12/5 wt% Au/Ge/Ni 84/12/4 wt% Au/In 82/18 wt% Au/Ir 50/50 wt% Au/Li 50/50 at% Au/Lu 98/2 wt% Au/Mo 97/3 wt% gold-nickel sputtering targets Au/Ni 55/45 wt% Au/Ni 72/25 wt% Au/Ni 90/10 wt% Au/Ni 95/5 at% Au/Ni 95/5 wt% Au/Ni 97.5/2.5 wt% gold-palladium sputtering targets Au/Pd /0.1 wt% Au/Pd 50/50 at% Au/Pd 50/50 wt% Au/Pd 60/40 wt% Au/Pd 64.9/35.1 wt% Au/Pd 70/30 wt% Au/Pd 75/25 wt% Au/Pd 80/20 wt% Au/Pd 97/3 at% Au/Pd 99.9/0.1 wt% Au/Pt 46/54 wt% Au/Pt 94/6 wt% Au/Pt 95/5 wt% Au/Pt/Cu 94.5/5/0.5 wt% Au/Rh 95/5 wt% Au/Sb 75/25 wt% Au/Sb 98/2 wt% Au/Sb 99.9/0.1 wt% Au/Sb 99/1 wt% Au/Si 96.8/3.2 wt% Au/Si 99.6/0.4 wt% gold-tin sputtering targets gold-silver e-beam pellets Au/Sn 10/90 wt% Au/Sn 5/95 wt% Au/Sn 60/40 wt% Au/Sn 70/30 wt% Au/Sn 73/27 wt% Au/Sn 75/25 wt% Au/Sn 77/23 wt% Au/Sn 78/22 wt% Au/Sn 80/20 wt% Au/Sn/Lu 78.4/19.6/2 Au/Sn/Lu 78/19.5/2.5 wt% Au/Sn/Ti/Ga/Ce alloy Au/Ta 95/5 wt% Au/Y 99.5/0.5 wt% gold-zinc sputtering targets Au/Zn 66/33 at%

Au/Zn 84/16 wt% Au/Zn 85/15 wt% Au/Zn 90/10 wt% Au/Zn 95/5 wt% Au/Zn 96.5/3.5 wt% Au/Zn 98/2 wt% Au/Zn 99.7/0.3 wt% Au50(Fe70/Co30)50 at% AuB 60:40 at% **AZO** В B 99.5% B/Co 15/85 B/Co 60/40 B/Hf 15.4/84.6 wt% B/Hf 5.7/94.3 wt% B/Si 27.8/72.2 wt% B/Si 36.6/63.4 wt% B/Si 47.3/52.7 wt% B/Si 80:20 at% B/Si/Cr B/Si/Sb B/Si/Sn **B2O3** B₄C Ba 99.5% Ba/Al 72/28 wt% Ba/Al/Eu 61.6/35.5/2.9 wt% Ba/Al/Eu 64/33.4/2.6 at% Ba/Ce/Si 85.6/1.8/12.6 wt% Ba/Ce/Y 50/45/5 at% Ba/Eu 93.4/6.6 wt% Ba/Eu 94/6 at% Ba/Eu 95.6/4.4 wt% Ba/Eu 95.6/4.4 wt% Ba/Eu 96.7/3.3 wt% Ba/Eu 96/4 at% Ba/Eu 97.8/2.2 wt% Ba/Eu 97/3 at% Ba/Sr 50/50 at% Ba/Sr/Ca 48/48/4 Ba/Ti 50/50 AT %, **BaCuO** BaO BaO6Fe2O3 BaSc2Te4 BaTiO3 BaY2Te4 BaZrO3 BC 94/6 at% Be 99.5% Bi

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Bi.3Sb1.7Te3.89
Bi.3Sb1.7Te4.26
Bi/In 2/1 at%
Bi/In 67/33 wt%
Bi/In/Sn 57/26/17 wt%
Bi/Sb 87:13 at%
Bismuth-antimony sputtering targets
Bismuth-antimony tellurium sputtering targets
Bi/Sb/Te
Bi/Sb/Te 0.4/1.6/3.3 at%
Bi/Sb/Te 0.5/1.5/3 at%
Bi/Sb/Te 0.5/1.5/3 at%
Bi/Sb/Te 1.8/0.2/3.3 at%
Bi/Sb/Te 2/2.7/0.3 at%
Bi/Sb/Te 2/2/5 at%
Bi/Sb/Te 4:16:33 at%
Bismuth-telluride
Bi/Te 2/3 at%
Bi/Te 2/4.4 at%
Bi/Te 2:4 at%
Bi/Te 63/37 at%
Bi/Te/Sb 0.4/3/1.6 at%
Bi/Zn/Nb 1.5/1.5/1.507
Bi0.3Sb1.7Te(1:2)
Bi15Sb85Te1.78 at%
Bi2Dy1Fe4Ga1
Bi2O3/TiO2 95.4/4.6 at%
Bi2S3
Bi2Te3
Bi2Te3.3
Bi2Te4
Bi2Te4.4
BK7
BN
C
C (graphite)
C (vitreous)
C/CuO 2/1
calcium sputtering targets, calcium evaporation pellets
Ca 99%
CaF2
CaO
CaO/Ru 50/50 at%
CaTiO3
Cd
Cd/Ga 99.5/0.5 wt%
Cd/In 99.5/0.5 wt%
Cd/Sn 65/35
Cd/Sn 74/26
Cd/Te 50/50 at%
Cd/Zn/Te
Cd2SnO4
```

CdO CdS CdS 0.8/1 mol% cerium sputtering targets Ce Ce/Co/In 1:1:11 at% Ce/Co/In 1:1:20 at% Ce/Co/In 1:1:5 at% Ce/Gd 75/25 at% Ce/Gd 78.1/21.9 wt% Ce/Gd 80/20 at% Ce/Gd 80/20 wt% Ce/Gd 85/15 mol% Ce/Gd 87/13 at% Ce/Gd 88.9/11.1 wt% Ce/Gd 89/11 wt% Ce/Gd 90/10 at% Ce/Sm 70/30 at% Ce/Sm 78.8/21.2 wt% Ce/Sm 80/20 at% Ce/Tb/Fe/Co 43.2/12.3/17.2/27.3 Ce/Ti 20/80 at% CeCo2 Celn3 CeO₂ CIGO cobalt sputtering targets Co 99.995% Co/Al 81.4/18.6 wt% Co/Al 86.8/13.2 wt% Co/Al 92.5/7.5 wt% Co/Al 97.65/2.35 wt% 5% Co/Al/Cr/Fe 59.4/13.6/15.7/11.3 wt% Co/B 60/40 at% Co/B 80/20 at% Co/B 95.6/4.4 wt% Co/B 96.9/3.1 wt% Co/B 97.1/2.9 wt% Co/B 98/2 wt% Co/B/Si 82/17/1 at% Co/C 99.9/0.1 wt% cobalt-chromium sputtering targets Co/Cr 4:1 at% Co/Cr 65:35 at% Co/Cr 67.8/32.2 wt% Co/Cr 69.4/30.6 wt% Co/Cr 70/30 at% Co/Cr 72.6/27.4 wt% Co/Cr 72/28 wt% Co/Cr 75:25 at% Co/Cr 76.3/23.7 wt% Co/Cr 78/22 wt% Co/Cr 80.1/19.9 wt% Co/Cr 80/20 at%

```
Co/Cr 80/20 wt%
Co/Cr 81.9/18.1 wt%
Co/Cr 82.8/17.2 wt%
Co/Cr 82/18 wt%
Co/Cr 84.7/15.3 wt%
Co/Cr 85/15 at%
Co/Cr 85/15 wt%
Co/Cr 86/14 wt%
Co/Cr 86/14 wt%
Co/Cr 88/12 at%
Co/Cr 89.3/10.7 wt%
Co/Cr 90/10 at%
Co/Cr 90/10 wt%
Co/Cr 92/8 at%
Co/Cr 94/6 wt%
Co/Cr 98/2 at%
Co/Cr 98/2 wt%
Co/Cr/Al/Y 74/20/5/1 wt%
Co/Cr/B 73/22/5 at%
Co/Cr/Fe 67.8/19.5/12.7 wt%
Co/Cr/Fe/Al
Co/Cr/Fe/Al 59.4/15.7/11.3/13.6 wt%
Co/Cr/Fe/AI 63.3/15.2/10.9/10.5 wt%
Co/Cr/Mn 69.6/27.5/2.9 wt%
Co/Cr/Pt
Co/Cr/Pt 34.2/36.5/29.3 at%
Co/Cr/Pt 47.7/8.1/44.2 wt%
Co/Cr/Pt 54.4/10.1/35.5 wt%
Co/Cr/Pt 56.9/9.6/33.5 wt%
Co/Cr/Pt 57.6/8.9/33.5 wt%
Co/Cr/Pt 58.7/13.9/27.4 wt%
Co/Cr/Pt 58/14.6/27.4 wt%
Co/Cr/Pt 65:20:15 at%
Co/Cr/Pt 66/22/12 at%
Co/Cr/Pt 70/18/12 at%
Co/Cr/Pt 71/17/12 at%
Co/Cr/Pt 72:21:7 at%
Co/Cr/Pt 74/13/13 at%
Co/Cr/Pt 75/12/13 at%
Co/Cr/Pt 75/13/12 wt%
Co/Cr/Pt 77:15:8 at%
Co/Cr/Pt 78:10:12 at%
Co/Cr/Pt 84/10/6 at%
Co/Cr/Pt/B
Co/Cr/Si 50/25/25 at%
Co/Cr/Ta 65.2/20.5/14.3 wt%
Co/Cr/Ta 78/17/5 at%
Co/Cr/Ta 78/17/5 wt%
Co/Cr/Ta 80.2/11/8.8 wt%
Co/Cr/Ta/Pt 70/16/4/10 wt%
Co/Cu 50/50 at%
Co/Cu 94.6/5.4 wt%
cobalt-iron sputtering targets
Co/Fe 1:1 at%
```

Co/Fe 1:2 at% Co/Fe 10.5/89.5 wt% Co/Fe 10/90 wt% Co/Fe 20.9/79.1 wt% Co/Fe 25/75 at% Co/Fe 25/75 wt% Co/Fe 30/70 at% Co/Fe 31.1/68.9 wt% Co/Fe 34.5/65.5 wt% Co/Fe 34.5/65.5 wt% Co/Fe 35/65 at% Co/Fe 35/65 wt% Co/Fe 40/60 wt% Co/Fe 41.3/58.7 wt% Co/Fe 50/50 at% Co/Fe 50/50 wt% Co/Fe 51.3/48.7 wt% Co/Fe 60/40 at% Co/Fe 60/40 wt% Co/Fe 61.3/38.7 wt% Co/Fe 65/35 at% Co/Fe 65/35 wt% Co/Fe 67.9/32.1 wt% Co/Fe 68.9/31.1 wt% Co/Fe 70/30 at% Co/Fe 70/30 wt% Co/Fe 71.1/28.9 wt% Co/Fe 75/25 at% Co/Fe 76/24 wt% Co/Fe 80.8/19.2 wt% Co/Fe 80.9/19.1 wt% Co/Fe 80/20 at% Co/Fe 80/20 wt% Co/Fe 81/19 wt% Co/Fe 84.7/15.3 (84/16 at%) Co/Fe 84.7/15.3 wt% Co/Fe 84/14 Co/Fe 84/16 wt% Co/Fe 85/15 at% Co/Fe 86/14 at% Co/Fe 9/1 at% Co/Fe 90.4/9.6 wt% Co/Fe 90.5/9.5 wt% Co/Fe 90/10 at% Co/Fe 90/10 wt% Co/Fe 91/9 at% Co/Fe 94/6 at% Co/Fe 95.3/4.7 wt% Co/Fe 95/5 at% Co/Fe 97.9/32.1 wt% Co/Fe/Al 2:1:1 at Co/Fe/Al 32/32/36 at% Co/Fe/Al 35/35/30 at% Co/Fe/Al 36/36/28 at%

```
Co/Fe/Al 48/16/36 at%
Co/Fe/Al 54.2/25.7/20.1 wt%
Co/Fe/Al 56.6/28.8/16.6 wt%
Co/Fe/Al 58.7/27.8/13.4 wt%
Co/Fe/Al 61.6/25/13.4 wt%
Co/Fe/Al 63.7/25.9/10.4 wt%
Co/Fe/Al 65.7/26.7/7.6 wt%
Co/Fe/Al 69.4/28.2/2.4 wt%
Co/Fe/Al/B 55.7/26.4/12.8/5.1 wt%
Co/Fe/Al/B 57.4/27.2/13.1/2.3 wt%
Co/Fe/Al/Si 2/1/0.5/0.5 at%
Co/Fe/Al/Si 4:1:1:2 at%
Co/Fe/Al/Si 50:25:12.5:12.5 at%
Co/Fe/Al/Si 54/25.6/10/10.4 wt%
Co/Fe/Al/Si 56.4/26.7/8.3/8.6 wt%
Co/Fe/Al/Si 58.6/27.8/6.7/7 wt%
cobalt-iron-boron sputtering targets
Co/Fe/B
Co/Fe/B 60:20:20 at%
Co/Fe/B 10.1/86.6/3.3 wt%
Co/Fe/B 10/85.4/4.6 wt%
Co/Fe/B 19.9/75.5/4.6 wt%
Co/Fe/B 2:2:1 at%
Co/Fe/B 20.2/76.5/3.3 wt%
Co/Fe/B 20/60/20 at%
Co/Fe/B 24.8/70.6/4.6 wt%
Co/Fe/B 25.2/71.6/3.2 wt%
Co/Fe/B 29.7/65.8/4.5 wt%
Co/Fe/B 3/1/1 at%
Co/Fe/B 30.1/66.6/3.3 wt%
Co/Fe/B 34.6/60.9/4.5 wt%
Co/Fe/B 35.1/61.7/3.2 wt%
Co/Fe/B 37.5/37.5/25 at%
Co/Fe/B 39.4/56.1/4.5 wt%
Co/Fe/B 4:4:2 at%
Co/Fe/B 40/40/20 at%
Co/Fe/B 40/56.8/3.2 wt%
Co/Fe/B 44.2/51.3/4.5 wt%
Co/Fe/B 44.9/51.9/3.2 wt%
Co/Fe/B 46/24/20 at%
Co/Fe/B 47.5/45.0/7.5 wt%
Co/Fe/B 48/32/20 at%
Co/Fe/B 49.4/46.8/3.8 wt%
Co/Fe/B 49.7/47.1/3.2 wt%
Co/Fe/B 49.9/44/6.1 wt%
Co/Fe/B 49.9/44/6.1 wt%
Co/Fe/B 49/21/30 at%
Co/Fe/B 49/46.5/4.5 wt%
Co/Fe/B 50.7/44.7/4.6 wt%
Co/Fe/B 51.4/45.3/3.3 wt%
Co/Fe/B 51/34/15 at%
Co/Fe/B 52/45.9/2.1 wt%
Co/Fe/B 53.8/41.7/4.5 wt%
Co/Fe/B 54.5/42.3/3.2 wt%
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Co/Fe/B 56/24/20 at%
Co/Fe/B 57.7/36.4/5.9 wt%
Co/Fe/B 58.5/37/4.5 wt%
Co/Fe/B 59.3/37.5/3.2 wt%
Co/Fe/B 6:2:2 at%
Co/Fe/B 60/20/20 at%
Co/Fe/B 60/20/20 at%
Co/Fe/B 60/25/15 at%
Co/Fe/B 62.3/31.8/5.9 wt%
Co/Fe/B 64.1/32.7/3.2 wt%
Co/Fe/B 65.5/14.5/20 at%
Co/Fe/B 65.5/26.6/7.9 wt%
Co/Fe/B 65.9/26.7/7.4 wt%
Co/Fe/B 65.9/26.8/7.3 wt%
Co/Fe/B 68.2/25.8/6 wt%
Co/Fe/B 68.8/28/3.2 wt%
Co/Fe/B 68.9/27/3.1 wt%
Co/Fe/B 68.9/28/3.2
Co/Fe/B 68/27.6/4.4 wt%
Co/Fe/B 68/27.6/4.4 wt%
Co/Fe/B 69.3/26.2/4.5 wt%
Co/Fe/B 69.7/28.3/2 wt%
Co/Fe/B 70.2/26.6/3.2 wt%
Co/Fe/B 70.9/28.1/1 wt%
Co/Fe/B 71.1/26.9/2 wt%
Co/Fe/B 72.7/22.9/4.4 wt%
Co/Fe/B 72/18/10 at%
Co/Fe/B 72/20/8 at%
Co/Fe/B 72/8/20 at%
Co/Fe/B 73.5/16.5/10 at%
Co/Fe/B 73.6/23.2/3.2 wt%
Co/Fe/B 74.9/17.7/7.4 wt%
Co/Fe/B 76.1/18/5.9 wt%
Co/Fe/B 76.5/8.5/15 at%
Co/Fe/B 78.1/14.1/7.8 wt%
Co/Fe/B 78.3/18.5/3.2 wt%
Co/Fe/B 78.5/14.2/7.3 wt%
Co/Fe/B 79.2/18.8/2 wt%
Co/Fe/B 80.6/13.5/5.9 wt%
Co/Fe/B 80/10/10 at%
Co/Fe/B 81.9/13.7/4.4 wt%
Co/Fe/B 81/14.6/4.4 wt%
Co/Fe/B 82.8/12.8/4.4 wt%
Co/Fe/B 82.9/13.9/3.2 wt%
Co/Fe/B 82/14.8/3.2 wt%
Co/Fe/B 83.9/14.1/2 wt%
Co/Fe/B 83.9/8.8/7.3 wt%
Co/Fe/B 83/15/2 wt%
Co/Fe/B 86.5/9.1/4.4 wt%
Co/Fe/B 86.5/9.1/4.4 wt%
Co/Fe/B 87.6/9.2/3.2 wt%
Co/Fe/B 91.1/4.5/4.4 wt%
Co/Fe/B 92.3/4.6/3.1 wt%
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Co/Fe/B/Si 60/20/10/10 at%

```
Co/Fe/B/Si 63.4/25.8/2.2/8.6 wt% 8
Co/Fe/B/Si 64.5/26.2/1.1/8.2 wt% 1
Co/Fe/B/Si 64.5/26.2/3.4/5.9 wt% 9
Co/Fe/B/Si 64/25/2.8/7.2 wt% 7
Co/Fe/B/Si 65.6/26.7/2.1/5.6 wt%1
Co/Fe/B/Si 66.6/27.1/1/5.3 wt% 5
Co/Fe/B/Si 66.8/27.1/3.3/2.8 wt% 3
Co/Fe/B/Si 67.1/27.3/1.6/4 wt% 6
Co/Fe/B/Si 67.7/27.5/2.1/2.7 wt% 4
Co/Fe/B/Si 68.6/27.9/1/2.5 wt% 10
Co/Fe/B/Si 69/21.8/1/8.2 wt% 13
Co/Fe/B/Si 70.1/22.2/2.1/5.6 wt% 11
Co/Fe/B/Si 71.4/22.5/3.3/2.8 wt% 12
Co/Fe/B/Si 73.4/17.4/1/8.2 wt% 16
Co/Fe/B/Si 74.6/17.7/2.1/5.6 wt% 14
Co/Fe/B/Si 75.9/18/3.3/2.8 wt% 15
Co/Fe/B/Zr 51.7/21/2.9/24.5 wt%
Co/Fe/B/Zr 53.1/21.6/1.9/23.5 wt%
Co/Fe/B/Zr 55/22.3/2.4/20.3 wt%
Co/Fe/Be 67.6/27.5/4.9 wt%
Co/Fe/Be 68.5/27.8/3.7 wt%
Co/Fe/Be 69.2/28.1/2.7 wt%
Co/Fe/Be 69.9/28.4/1.7 wt%
Co/Fe/Be 70.5/28.7/0.8 wt%
Co/Fe/C 66.5/27/6.5 wt%
Co/Fe/C 67.6/27.5/4.9 wt%
Co/Fe/C 68.6/27.9/3.5 wt%
Co/Fe/C 69.5/28.2/2.3 wt%
Co/Fe/C 70.3/28.6/1.1 wt%
Co/Fe/C 72.3/22.8/4.9 wt%
Co/Fe/Cr
Co/Fe/Cr 54.8/22.2/23 wt%
Co/Fe/Cr 58.1/23.6/18.3 wt%
Co/Fe/Cr 61.4/24.9/13.7 wt%
Co/Fe/Cr 61.6/22/16.4 wt%
Co/Fe/Cr 64.7/26.2./9.1 wt%
Co/Fe/Cr/B 40:18:30:12 at%
Co/Fe/Cr/B 43/29/10/18 at%
Co/Fe/Dy 47.5/47.5/5 at%
Co/Fe/Dy 48.5/48.5/3%
Co/Fe/Dy 49.5/49.5/1 at%
Co/Fe/Ga 30/30/40 at%
Co/Fe/Gd 18.2/17.2/64.6 wt%
Co/Fe/Gd 20.7/19.7/59.6 wt%
Co/Fe/Gd 21.8/13.7/64.5 wt%
Co/Fe/Gd 21.8/13.7/64.5 wt%
Co/Fe/Gd 23.6/22.4/54 wt%
Co/Fe/Gd 24.8/15.7/59.5 wt%
Co/Fe/Gd 25.3/10.3/64.4 wt%
Co/Fe/Gd 26.8/25.4/47.7 wt%
Co/Fe/Gd 28.3/17.8/53.9 wt%
Co/Fe/Gd 28.9/11.7/59.4 wt%
Co/Fe/Gd 28.9/6.9/64.2 wt%
Co/Fe/Gd 30.5/28.9/40.6 wt%
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Co/Fe/Gd 32.5/3.4/64.1 wt%
Co/Fe/Gd 32.9/13.4/53.7 wt%
Co/Fe/Gd 33/7.8/59.2 wt%
Co/Fe/Gd 35.5/8.9/53.6 wt%
Co/Fe/Gd 35/35/35 at%
Co/Fe/Gd 37.4/15.2/47.4 wt%
Co/Fe/Gd 37/3.9/59.1 wt%
Co/Fe/Gd 42.1/4.4/53.5 wt%
Co/Fe/Gd 42.4/17.2/40.4 wt%
Co/Fe/Gd 45.5/19.5/35 at%
Co/Fe/Gd 45.5/19.5/35 at%
Co/Fe/Gd 65/35 at%
Co/Fe/Hf
Co/Fe/Hf 30.7/12.4/56.9 wt%
Co/Fe/Hf 35.1/14.3/50.6 wt%
Co/Fe/Hf 40.2/16.3/43.5 wt%
Co/Fe/Hf 46.1/18.7/35.2 wt%
Co/Fe/Hf 53/21.5/25.5 wt%
Co/Fe/Hf 60/20/20 at%
Co/Fe/Hf/B 50.5/20.5/27.3/1.7 wt%
Co/Fe/Hf/B 51.8/21/26.4/0.8 wt%
Co/Fe/Hf/Zr 35.6/14.5/33/16.9 wt%
Co/Fe/Hf/Zr 39/15.8/33.7/11.5 wt%
Co/Fe/Hf/Zr 40.1/16.2/28.9/14.8 wt%
Co/Fe/Hf/Zr 41.2/16.8/23.8/18.2 wt%
Co/Fe/Hf/Zr 45/18.3/24.3/12.4 wt%
Co/Fe/Hf/Zr 47.8/19.4/12.9/19.8 wt%
Co/Fe/Hf/Zr 50.4/20.5/19.3/9.8 wt%
Co/Fe/In 38.5/15.6/45.9 wt%
Co/Fe/In 47.6/19.3/33.1 wt%
Co/Fe/In 58.3/23.7/18 wt%
Co/Fe/Mg 62.4/25.3/12.3 wt%
Co/Fe/Mg 64.4/26.1/9.5 wt%
Co/Fe/Mg 66.2/26.9/6.9 wt%
Co/Fe/Mg 68/27.6/4.4 wt%
Co/Fe/Mg 69.6/28.3/2.1 wt%
Co/Fe/Mn/Si 55.7/15.3/15/14 wt%
Co/Fe/Mn/Si 57.1/14.6/14.3/14 wt%
Co/Fe/Mn/Si 57.8/14.2/14/14 wt%
Co/Fe/Mn/Si 58.5/13.9/13.6/14 wt%
Co/Fe/Mn/Si 58.5/20.8/6.8/13.9 wt%
Co/Fe/Mn/Si 58.6/6.9/20.5/14 wt%
Co/Fe/Mn/Si 59.2/13.5/13.3/14 wt%
Co/Fe/Mn/Si 60/13.2/13/13.9 wt%
Co/Fe/Mn/Si 61.4/12.5/12.3/13.9 wt%
Co/Fe/Mo 20/57/23 wt%
Co/Fe/Mo 43.5/33.8/22.7 wt%
Co/Fe/Mo 45.8/18.6/35.6 wt%
Co/Fe/Mo 47.5/36.9/15.6 wt%
Co/Fe/Mo 50.3/20.4/29.3 wt%
Co/Fe/Mo 51.8/40.2/8 wt%
Co/Fe/Mo 54.8/9.9/35.3 wt%
Co/Fe/Mo 58/23.6/18.4 wt%
Co/Fe/Mo 60.1/10.8/29.1 wt%
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Co/Fe/Mo 65.4/26.6/8 wt%
Co/Fe/Mo 65.7/11.9/22.4 wt%
Co/Fe/Mo 66.4/11.1/22.5 wt%
Co/Fe/Mo 69.2/12.5/18.3 wt%
Co/Fe/Mo 71.6/12.9/15.5 wt%
Co/Fe/Mo 72.5/12.1/15.4 wt%
Co/Fe/Mo 78.9/13.2/7.9 wt%
Co/Fe/Mo 78/14.1/7.9 wt%
Co/Fe/Mo/Si/B 81.2/4.6/2/9.8/2.4 wt%
Co/Fe/Ni 61/14/25 wt%
Co/Fe/Ni 61/19/20 wt%
Co/Fe/Ni 61/24/15 wt%
Co/Fe/Ni 65/23/12 wt%
Co/Fe/Ni/B 10/62/10/18 at%
Co/Fe/Ni/B/Hf 6/70/6/9/9 at%
Co/Fe/Ni/B/Si 82.3/4.4/1.2/3.2/8.9 wt%
Co/Fe/Ni/Si/B 80.7/4.7/2.5/8.9/3.2 wt%
Co/Fe/Os 42.4/40.2/17.4 wt%
Co/Fe/Os 46.6/44.1/9.3 wt%
Co/Fe/Os 58.8/23.9/17.3 wt%
Co/Fe/Os 64.6/26.2/9.2 wt%
Co/Fe/Os/B 39.1/37.1/20.2/3.6 wt%
Co/Fe/Os/B 43.7/41.4/10.9/4 wt%
Co/Fe/Os/B 54.3/22.1/20/3.6 wt%
Co/Fe/Os/B 60.6/24.6/10.8/4 wt%
Co/Fe/Pb 28.1/11.4/60.5 wt%
Co/Fe/Pb 37.6/15.3/47.1 wt%
Co/Fe/Pb 50.9/20.7/28.4 wt%
Co/Fe/Pt
Co/Fe/Pt 16.3/6.6/77.1 wt%
Co/Fe/Pt 20.9/19.8/59.3 wt%
Co/Fe/Pt 25/15.8/59.2 wt%
Co/Fe/Pt 29.2/11.8/59 wt%
Co/Fe/Pt 33.2/7.9/58.9 wt%
Co/Fe/Pt 38.6/15.7/45.7 wt%
Co/Fe/Pt 42/18/40 at%
Co/Fe/Pt 44.6/18.1/37.2 wt%
Co/Fe/Pt 50.4/9.6/40 at%
Co/Fe/Pt 51.8/21/27.2 wt%
Co/Fe/Pt 56/24/20 at%
Co/Fe/Pt 67.2/12.8/20 at%
Co/Fe/Pt/B 24.9/10.1/63.3/1.7 wt%
Co/Fe/Pt/B 32.9/13.3/51.8/2 wt%
Co/Fe/Sb 37.4/15.2/47.4 wt%
Co/Fe/Sb 46.6/18.9/34.4 wt%
Co/Fe/Sb 57.7/23.4/18.9 wt%
Co/Fe/Si 2/1/1 at%
Co/Fe/Si 43/30.7/26.3 at%
Co/Fe/Si 44.9/24.4/30.7 at%
Co/Fe/Si 58.9/23.9/17.2 wt%
Co/Fe/Si 61.2/24.9/13.9 wt%
Co/Fe/Si 63.4/25.8/10.8 wt%
Co/Fe/Si 65.5/26.6/7.9 wt%
Co/Fe/Si 67.5/27.4/5.1 wt%
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Co/Fe/Si 72.2/17.1/10.7 wt%
Co/Fe/Si 77.4/11.9/10.7
Co/Fe/Si 79.9/12.3/7.8 wt%
Co/Fe/Si 82.3/12.7/5 wt%
Co/Fe/Si/B 76.9/13.9/8.2/1
Co/Fe/Si/B 77.8/13/8.2/1 wt%
Co/Fe/Si/B 79.1/13.2/5.5/2.1 wt%
Co/Fe/Si/B 80.5/13.5/2.8/3.2 wt%
Co/Fe/Si/B 80/12.4/5.5/2.1
Co/Fe/Si/B 81.4/12.6/2.8/3.2
Co/Fe/Si/B 82.2/8.7/8.1/1 wt%
Co/Fe/Si/B 83.5/8.8/5.5/2.1
Co/Fe/Si/B 85/9/2.8/3.2 wt%
Co/Fe/Si/B 86.5/4.3/8.1/1 wt%
Co/Fe/Si/B 88/4.4/5.5/2.1 wt%
Co/Fe/Si/B 89.5/4.5/2.8/3.2 wt%
Co/Fe/Ta/Zr 61/27/8/4 at%
Co/Fe/Ti 59/23.9/17.1 wt%
Co/Fe/Ti 62.1/25.2/12.7 wt%
Co/Fe/Ti 65.1/26.5/8.4 wt%
Co/Fe/Ti 68.2/27.7/4.1 wt%
Co/Fe/V 48.3/49.7/2 wt%
Co/Fe/V 49/1.9/49.1 at%
Co/Fe/V 49/49/2 wt%
Co/Fe/V 50.4/47.8/1.8 wt%
Co/Fe/W 16.5/47.1/36.4 wt%
Co/Fe/W 39.7/16.1/44.2 wt%
Co/Fe/W 45.6/18.5/35.9 wt%
Co/Fe/W 52.6/21.4/26 wt%
Co/Fe/W 61/24.7/14.3 wt%
Co/Fe/Y 51.4/28.9/27.7 wt%
Co/Fe/Y 56/22.7/21.3 wt%
Co/Fe/Y 60.8/24.7/14.5 wt%
Co/Fe/Zn 51.7/21/27.3 wt%
Co/Fe/Zn 55.5/22.5/22 wt%
Co/Fe/Zn 59.3/24.1/15.6 wt%
Co/Fe/Zn 63.2/25.7/11.1 wt%
Co/Fe/Zn 67.1/27.3/5.6 wt%
Co/Fe/Zn 67.5/16/16.5 wt%
Co/Fe/Zn 71.9/17/11.1 wt%
Co/Fe/Zn 76.3/18.1/5.6 wt%
Co/Fe/Zn 79/18.7/2.3 wt%
Co/Fe/Zr 38.5/15.6/45.9 wt%
Co/Fe/Zr 42.5/17.2/40.3 wt%
Co/Fe/Zr 46.7/19/34.3 wt%
Co/Fe/Zr 51.1/20.7/28.2 wt%
Co/Fe/Zr 55.7/22.6/21.7 wt%
Co/Fe/Zr 60.5/24.6/14.9 wt%
Co/Fe/Zr 60/20/20 at%
Co/Fe/Zr 60/25/15 at%
Co/Fe/Zr/B 58.3/23.7/16.1/1.9 wt%
Co/Fe/Zr/B 59.5/24.2/15.5/0.9 wt%
Co/Fe/Zr/B 83.6/4.4/8/4 at%
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Co/FeZr 60:25:15 at%

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Co/Ga 80/20 at%
Co/Ga 85/15 at%
Co/Ga 88.4/11.6 wt%
Co/Ga 94.1/5.9 wt%
Co/Gd 13.8/86.2 wt%
Co/Gd 20/80 at%
Co/Gd 20/80 wt%
Co/Gd 27.3/72.7 wt%
Co/Gd 30/70 at%
Co/Gd 36/64 wt%
Co/Gd 40/60 at%
Co/Gd 41/59 wt%
Co/Gd 43.8/56.2 wt%
Co/Gd 49.7/50.3 wt%
Co/Gd 50/50 at%
Co/Gd 52.5/47.5 at%
Co/Gd 52.9/47.1 wt%
Co/Gd 55/45 at%
Co/Gd 57.5/42.5 at%
Co/Gd 60/40 at%
Co/Gd 60/40 wt%
Co/Gd 62.5/37.5 at%
Co/Gd 65/35 at%
Co/Gd 68/32 wt%
Co/Gd 70/30 at%
Co/Gd 75/25 at%
Co/Gd 77.1/22.9 wt%
Co/Gd 80/20 at%
Co/Gd 85/15 at%
Co/Gd 85/15 at%
Co/Gd 87.7/12.3 wt%
Co/Gd 90/10 at%
Co/Gd/B 51/34/15 at%
Co/Gd/Hf 51/34/15 at%
Co/Gd/Nb 51/34/15 at%
Co/Gd/Si 51/34/15 at%
Co/Gd/Tb 28/49.8/22.2 wt%
Co/Gd/Tb 30.5/54.3/15.2 wt%
Co/Gd/Tb 33.2/59/7.8 wt%
Co/Gd/Zr 51/34/15 at%
Co/Ge 2/1 at%
Co/La/Sr/Fe 40/35/15/10 at%
Co/Mn 15.9/84.1 wt%
Co/Mn 51.8/48.2 wt%
Co/Mn 68.5/31.5
Co/Mn 85.9/14.1 wt%
Co/Mn 88/12 at%
Co/Mn 91/9 at%
Co/Mn 92/8 at%
Co/Mn 96/4 at%
Co/Mn 98/2 at%
cobalt-manganese sputtering targets, cobalt-manganese-aluminum sputtering targets,
cobalt-manganese-silicon sputtering targets, heusler alloy sputtering targets
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Co/Mn/Al 2:1:1 at%

Co/Mn/Al 46.3/43.1/10.6 wt% Co/Mn/Al 46/30/24 at% Co/Mn/Al 46:27:27 at% Co/Mn/Al 47/29/24 at% Co/Mn/Al 50/25/25 at% Co/Mn/Ge 24.5/46.6/29 wt% Co/Mn/Ge 24.5/47.1/28.4 wt% Co/Mn/Ge 48/22.4/29.6 wt% Co/Mn/Ge 50/25/25 at% Co/Mn/Sb 29/32.1/38.9 Co/Mn/Sb 35.1/29.4/35.5 Co/Mn/Si 43.7/28/28.4 at% Co/Mn/Si 44:28:28 at% Co/Mn/Si 50/25/25 at% Co/Mn/Si 58.7/27.4/13.9 wt% Co/Mn/Si/B 84/6.8/5.8/3.4 wt% Co/Mn/Sn 40.4/18.9/40.7 wt% Co/Mn/Sn 50/25/25 wt% Co/Mo 38.1/61.9 wt% Co/Mo 50/50 at% Co/Nb/Zr 77/15.9/7.1 wt% Co/Nb/Zr 78.3/17.4/4.3 wt% Co/Nb/Zr 78.4/13.1/8.6 wt% Co/Nb/Zr 81/11.8/7.2 wt% Co/Nb/Zr 85/12/3 at% Co/Nb/Zr 89.5/6.1/4.5 wt% cobalt-nickel sputtering targets Co/Ni 2/1 at% Co/Ni 2:8 at% Co/Ni 20/80 at% Co/Ni 25/75 at% Co/Ni 30/70 at% Co/Ni 30/70 at% Co/Ni 40.1/49.9 wt% Co/Ni 45.1/54.9 wt% Co/Ni 45/55 at% Co/Ni 50.1/49.9 wt% Co/Ni 50/50 at% Co/Ni 50/50 wt% Co/Ni 55.1/44.9 wt% Co/Ni 55/45 at% Co/Ni 65.1/34.9 wt% Co/Ni 65/35 at% Co/Ni 70.1/29.9 wt% Co/Ni 80.1/19.9 wt% Co/Ni 80/20 at% Co/Ni 80/20 wt% Co/Ni 90/10 wt% Co/Ni/Cr 70/25/5 wt% Co/Ni/Cu/FeS Co/Ni/Fe 60/20/20 at% Co/Ni/Ga 50/24/36 at% Co/P 80/20 at% cobalt-palladium sputtering targets

```
Co/Pd 15/85 at%
Co/Pd 19.2/80.8 wt%
Co/Pd 25/75 at%
Co/Pd 27/73wt%
Co/Pd 33.3/66.6 at%
Co/Pd 35.6/64.4 wt%
Co/Pd 35/65 at%
Co/Pd 45.4/54.6 wt%
Co/Pd 45/55 at%
Co/Pd 55/45 at%
Co/Pd 56.4/43.6 wt%
Co/Pd 66.6/33.3 at%
Co/Pd 68.9/31.1 wt%
Co/Pd 75/25 at%
cobalt-platinum sputtering targets
Co/Pt 3/1 at%
Co/Pt 30/70 at%
Co/Pt 40/60 at%
Co/Pt 50/50 at%
Co/Pt 54.7/45.3 wt%
Co/Pt 65/35 at%
Co/Pt 70/30 at%
Co/Pt 80/20 at%
Co/Pt 82/18 at%
Co/Pt 87/13 at%
Co/Pt/Cr 51.3/42.4/6.3 wt%
Co/Pt/Cr 75/12/13 at%
Co/Pt/Cr/B 41.3/28.7/29.4/0.6 wt%
Co/Pt/Ni 70/20/10 at%
Co/Rh 50/50 at%
Co/Si 67.7/32.3 wt%
Co/Si 75.9/24.1 wt%
Co/Si 83/17 wt%
Co/Si 95/5 wt%
Co/Si/B 82/1/17 at%
Co/Sn 1.3/98.7 wt%
Co/Sn 11/89 wt%
Co/Sn 14.2/85.8 wt%
Co/Sn 2.6/97.4 wt%
Co/Sn 3.9/96.1 wt%
Co/Sn 5.2/94.8 wt%
Co/Sn 6.6/93.4 wt%
Co/Sn 8.1/91.9 wt%
Co/Ta 20/80 at%
Co/Ta 49.4/50.6 wt%
Co/Ta 50/50 at%
Co/Ta 80/20 at%
Co/Ta/Zr 90/5/5 at%
Co/Ta/Zr 92/3/5 at%
Co/Ta/Zr/B 82/10/60/2 wt%
Co/Ta/Zr/Tb 75.6/13.2/6.6/4.6 wt%
Co/Tb 50% at.
Co/Tb 59.7/40.3 wt%
Co/Tb 67.8/32.2 wt%
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Co/Tb 77/23 wt% Co/Tb 87.6/12.4 wt% Co/Ti 50/50 at% Co/Ti 78.7/21.3 wt% Co/Ti 83.1/16.9 wt% Co/Ti 86.46/12.54 wt% Co/Ti 87.5/12.5 wt% Co/Ti 91.7/8.3 wt% Co/Ti 91.7/8.3 wt% 5% Co/Ti 95.9/4.1 wt% Co/Ti/Sn 50/25/25 at% Co/V 45/55 at% Co/V 55/45 at% Co/V 59/41 at% Co/V 63/37 at% Co/V 69.8/30.2 wt% Co/V 76.7/23.3 wt% Co/V 78.6/21.4 wt% Co/V 80.4/19.6 wt% Co/V 82.2/17.8 wt% Co/V 84.1/15.9 wt% Co/V 85.9/14.1 wt% Co/V 87.7/12.3 wt% Co/V 89.5/10.5 wt% Co/W 49/51 wt% Co/W 56.2/43.8 wt% Co/W 64.5/35.5 wt% Co/W 74.3/25.7 wt% Co/W 85.9/14.1 wt% Co/Y 72.6/27.4 wt% Co/Y 83.3/16.7 at% Co/Y 85.6/14.4 wt% Co/Zn 10/90 at% Co/Zr 56.4/43.6 wt% Co/Zr 66/34 wt% Co/Zr 78.5/21.5 wt% Co/Zr 83.4/16.6 at% Co/Zr 85/15 at% Co/Zr 93/7 at% Co/Zr/B 82.2/15.9/1.9 wt% Co/Zr/B 87.9/11/1.1 wt% Co/Zr/Nb 86.7/1.8/11.5 wt% Co/Zr/Nb 91.1/1.2/7.7 at% Co/Zr/Ta 90/5/5 at% Co/Zr/Ta 91.7/2.26.1 at% Co:Fe 1:1 Co2Cr0.6Fe0.4Al Co2FeSi Co2Mn1Si1 Co2MnAl Co2MnGe Co2MnSi Co40Fe40B20 Co50Fe50/Pt 70/30 at%

```
(Co55Fe45)80B20
(Co55Fe45)82B18
(Co55Fe45)84B16
(Co55Fe45)86B14
(Co55Fe45)88B12
(Co55Fe45)90B10
(Co55Fe45)92B8
Co5Sm
(Co65Fe35)80B20
(Co65Fe35)82B18
(Co65Fe35)84B16
(Co65Fe35)86B14
(Co65Fe35)88B12
(Co65Fe35)90B10
(Co65Fe35)92B8
(Co70/Fe30)85Hf15
(Co75Fe25)80B20
(Co75Fe25)82B18
(Co75Fe25)84B16
(Co75Fe25)86B14
(Co75Fe25)88B12
(Co75Fe25)90B10
(Co75Fe25)92B8
(Co7Fe3)80B20
(Co7Fe3)82B18
(Co7Fe3)84B16
(Co7Fe3)86B14
(Co7Fe3)88B12
(Co7Fe3)90B10
(Co7Fe3)92B8
(Co8Fe2)80B20
(Co8Fe2)82B18
(Co8Fe2)84B16
(Co8Fe2)86B14
(Co8Fe2)88B12
(Co8Fe2)90B10
(Co8Fe2)92B8
Cobalt/Iron 70/30
Cobalt/Iron 85/15
CoCeIn5
CoCrAIY
CoFe2
CoFe2O4 at%
CoFeB 2:2:1 at%
CoFeB 63.3/32.3/4.4 wt%
CoFeB 65.9/27.8/7.3 wt%
CoFeB 67/27.2/5.8 wt%
CoFeB 68.9/27/3.1 wt%
CoFeB 68/27.6/4.4 wt%
CoFeB 69.7/28.3/2 wt%
CoFeB 70.4/28.6/1 wt%
CoFeB 72.6/22.9/4.5 wt%
CoFeB 77.3/18.3/4.4 wt%
CoFePt 55.9/22.7/21.4 wt%
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CoFePt 60.4/24.5/15 wt%
CoFePt 65.5/26.6/7.9 wt%
Constantan Ni/Cu 45/55 wt%
CoO
CoO 99.5%
CoO/SnO 10/90 at%
CoO/SnO 10/90 at%
CoO/SnO 15/85 at%
CoO/SnO 15/85 at%
CoO/SnO 20/80 at%
CoO/SnO 20/80 at%
CoTi2
Cr
Cr
Cr 5%
Cr 8%
Cr 99.995%
Cr/Al 50/50 at%
Cr/Al 50/50 at% 5%
Cr/Al 61.2/38.8 wt%
Cr/Al 65.8/34.2 wt%
Cr/Al 70.2/29.8 wt%
Cr/Al 74.3/25.7 wt%
Cr/Al 78.2/21.8 wt%
Cr/Al 81.8/18.2 wt%
Cr/Al 82.4/17.6 wt%
Cr/Al 85.2/14.8 wt%
Cr/Al 85.3/14.7 wt%
Cr/Al 88.5/11.5 wt%
Cr/Al 90.8/9.2 wt%
Cr/Al 94.6/5.4 wt%
Cr/B 91.8/8.2 wt%
Cr/Fe 53.2/46.8 wt%
Cr/Fe 58.3/41.7 wt%
Cr/Fe/Y 94/05/1 wt%
Cr/Ga 86/14 wt%
chromium-iridium sputtering targets
Cr/Ir 2.9/97.1 wt%
Cr/Ir 2.9/97.1 wt%
Cr/lr 50/50 at%
Cr/lr 6.3/93.7 wt%
Cr/lr 6.3/93.7 wt%
Cr/Ir 75/25 at%
Cr/Ir 90/10 at%
Cr/Ir 95/5 at%
chromium-manganese sputtering targets
Cr/Mn 32.8/67.2 wt%
Cr/Mn 32.8/67.2 wt%
Cr/Mn 38.7/61.3 wt%
Cr/Mn 39.7/60.3 wt%
Cr/Mn 40.7/59.3 wt%
Cr/Mn 40/60 at%
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Cr/Mn 41.7/58.3 wt%
Cr/Mn 42.7/57.3 wt%
Cr/Mn 43.6/56.4 wt%
Cr/Mn 44.6/55.4 wt%
Cr/Mn 45.6/54.4 wt%
Cr/Mn 45/55 at%
Cr/Mn 46.6/53.4 wt%
Cr/Mn 48.6/51.4 wt%
Cr/Mn 50/50 at%
Cr/Mn 53.6/46.4 wt%
Cr/Mn 55/45 at%
Cr/Mn 58.7/41.3 wt%
Cr/Mn 60/40 at%
Cr/Mn 77/23 wt%
Cr/Mn/Pd 39.8/40.1/18.1 wt%
Cr/Mn/Pd 41.9/44.2/13.9 wt%
Cr/Mn/Pd 44/46.5/9.5 wt%
Cr/Mn/Pt 31.1/40.1/28.8 wt%
Cr/Mn/Pt 34.6/36.6/28.8 wt%
Cr/Mn/Pt 36.9/39/24.1 wt%
Cr/Mn/Pt 37.5/39.7/22.8 wt%
Cr/Mn/Pt 40.8/43.1/16.1 wt%
Cr/Mn/Rh 12.1/44.4/13.5 wt%
Cr/Mn/Rh 40.1/42.3/17.6 wt%
Cr/Mn/Rh 42.1/44.4/13.5 wt%
Cr/Mn/Rh 44.2/46.6/9.2 wt%
chromium-molybdenum sputtering targets
Cr/Mo 11.9/88.1 wt%
Cr/Mo 25/75 at%
Cr/Mo 26.5/73.5 wt%
Cr/Mo 44.8/55.2 wt%
Cr/Mo 50.2/49.8 wt%
Cr/Mo 50/50 at%
Cr/Mo 55.8/44.2 wt%
Cr/Mo 61.9/38.1 wt%
Cr/Mo 68.4/31.6 wt%
Cr/Mo 75.4/24.6 wt%
Cr/Mo 75/25 at%
Cr/Mo 85:15 at%
Cr/Mo 90:10 at%
Cr/Mo 95:5 at%
Cr/Nb 51/49 wt%
Cr/Nb 56.6/43.4 wt%
Cr/Nb 62.7/37.3 wt%
Cr/Nb 69.1/30.9 wt%
Cr/Nb 76/24 wt%
Cr/Ni 50/50 wt%
Cr/Ni 80/20 wt%
Cr/P 99/1 wt%
Cr/Pd 13/87wt%
Cr/Pt 80/20 at%
Cr/Pt/Mn 45.5/45.5/9 at%
Cr/Re 29.5/70.5 wt%
Cr/Re 3/97
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Cr/Re 39.5/60.5 wt% Cr/Re 52.8/47.2 wt% Cr/Re 6.5/93.5 Cr/Re 71.5/28.5 wt% chromium-ruthenium sputtering targets Cr/Ru 11.4/88.6 Cr/Ru 43.5/56.5 wt% Cr/Ru 5.4/94.6 Cr/Ru 50/50 at% Cr/Ru 54.5/45.5 wt% Cr/Ru 67.2/32.8 wt% Cr/Ru 75/25 at% Cr/Ru 82.2/17.8 wt% (9:1 at) Cr/Ru 85:15 at% Cr/Ru 90/10 at% Cr/Ru 95/5 at% Cr/Ru/Ta 89.6/7.4/3 at% Cr/Ru/Ta 89.6/8.4/2 at% Cr/Ru/Ta 89.6/9.4/1 at% Cr/Sc 38.4/61.6 wt% Cr/Si 30/70 wt% Cr/SiO 80/20 wt% Cr/Ta 22.3/77.7 wt% Cr/Ta 34.8/65.2 wt% Cr/Ta 34.8/65.2 wt% Cr/Ta 40.1/59.9 wt% Cr/Ta 46.3/53.7 wt% Cr/Ta 53.5/46.5 wt% Cr/Ta 60/40 at% Cr/Ta 62/38 wt% Cr/Ta 62/38 wt% Cr/Ti 75/25 at% Cr/Ti 80/20 wt% Cr/Ti 90/10 at% Cr/Ti/Zr 40/30/30 wt% chromium-vanadium sputtering targets Cr/V 50/50 at% Cr/V 60.5/39.5 wt% Cr/V 65.5/34.5 wt% Cr/V 70.4/29.6 wt% Cr/V 85.3/14.7 wt% Cr/W (4:1) Cr/W 20/80 at% Cr/W 25/75 at% Cr/W 40/60 at% Cr/W 50:50 at% Cr/W 60/40 at% Cr/W 70:30 at% Cr/W 75/25 at% Cr/W 80/20 at% Cr/W 85:15 at% Cr/W 90/10 at% Cr/W 95:5 at% Cr2O3

Cr3C2 CrB₂ CrN Cs copper sputtering targets Cu 99.998% Copper-silver sputtering targets, electrum sputtering targets Cu/Ag 1:1 at% Cu/Ag 4:1 at% Cu/Ag 50/50 at% Cu/Ag 60/40 at% Cu/Aq 61.4/38.6 wt% Cu/Aq 61.4/38.6 wt% Cu/Ag 87/13 wt% Cu/Ag 87/13 wt% Cu/Ag 95/5 at% Cu/Aq 98/2 at% Cu/Ag 99.5/0.5 wt% Cu/Ag 99/1 at% Cu/Ag 99/1 wt% Cu/Ag/Au 66.1/21.1/12.8 wt% Cu/Aq/Au 69/27/4 at% Cu/Al 1:1 at% Cu/Al 33.1/66.9 wt% Cu/Al 33.3/66.7 at% Cu/Al 33/67 at% Cu/Al 50/50 at% Cu/Al 54.1/45.9 wt% Cu/Al 59.8/40.2 wt% Cu/Al 70.2/29.8 wt% Cu/Al 81.7/18.3 wt% Cu/Al 95.5/4.5 wt% Cu/Al 97.8/2.2 wt% Cu/Al 98/2 at% Cu/Al/Fe/Sn 90/7/2.7/.3 wt% Cu/Al2 copper-gold sputtering targets Cu/Au 75/25 wt% Cu/Au 80/20 wt% Cu/Au 80/20 wt% Cu/Au 98/2 at% Cu/B /0.1 wt% Cu/B 95.9/4.1 wt% Cu/B 97.1/2.9 wt% Cu/B 98.1/1.9 wt% Cu/B 99.1/0.9 wt% Cu/B 99.3/0.7 wt% Cu/B 99.5/0.5 wt% Cu/B 99.6/0.4 wt% Cu/B 99.7/0.3 wt% Cu/B 99.8/0.2 wt% Cu/Bi 23.3/76.7 wt% Cu/Bi 73.2/26.8 wt% Cu/Bi 85.3/14.7 wt%

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Cu/Bi 93.7/6.3 wt%
Cu/Bi 98.5/1.5 wt%
Cu/Bi 98.9/1.1 wt%
Cu/Bi 99.3/0.7 wt%
Cu/Bi 99.7/0.3 wt%
Cu/Bi 99.8/0.2 wt%
Cu/C 96/4 at%
Cu/C 97/3 at%
Cu/Ca 97.4/2.6 wt%
Cu/Co 98/2 at%
Cu/Fe 9/0.01
copper-gallium sputtering targets
Cu/Ga 2:1 at%
Cu/Ga 3/1 at%
Cu/Ga 3/2 at%
Cu/Ga 3:1 at%
Cu/Ga 33/67 at%
Cu/Ga 47.7/52.3 wt%
Cu/Ga 50/50 wt%
Cu/Ga 55/45 wt%
Cu/Ga 60/40 at%
Cu/Ga 60/40 wt%
Cu/Ga 66/34 wt%
Cu/Ga 70/30 at%
Cu/Ga 70/30 wt%
Cu/Ga 73.2/26.8 wt%
Cu/Ga 75/25 at%
Cu/Ga 75/25 wt%
Cu/Ga 76/24 wt%
Cu/Ga 77/23 at%
Cu/Ga 77/23 wt%
Cu/Ga 78/22 at%
Cu/Ga 80/20 at%
Cu/Ga 80/20 wt%
Cu/Ga 82/18 at%
Cu/Ga 85/15 at%
Cu/Ga 90/10 at%
Cu/Ga 90/10 wt%
Cu/Ga/In/Na
Cu/Ga/Na 73.48/24.2/2.33 wt%
Cu/Ga/Na 74.2/24.6/1.2 wt%
Cu/Ge 98/2 at%
Cu/Ge 99/1 at%
Cu/Ge/Au 90.3/6.7/3 wt%
copper-indium sputtering targets
Cu/In 57:43 at%
Cu/In 1/1 at%
Cu/In 11/9 at%
Cu/In 19.2/80.8 wt%
Cu/In 2:1 at%
Cu/In 22/78 wt%
Cu/In 33/67 wt%
Cu/In 35.6/64.4 wt%
Cu/In 45/55 at%
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Cu/In 45/55 at% Cu/In 55/45 wt% Cu/In 64/36 Cu/In 7/13 at% Cu/In 7/3 at% Cu/In 9/11 at% Cu/In 9:11 at% Cu/In/AI 55/40/5 at% copper-indium-gallium sputtering targets Cu/In/Ga Cu/In/Ga 0.45/0.35/0.165 at% Cu/In/Ga 1/0.8/0.3 at% Cu/In/Ga 33.33/55.56/11.11 wt% Cu/In/Ga 34.09/50.73/15.18 wt% Cu/In/Ga 35.7/52.4/11.9 wt% Cu/In/Ga 35.8/52.4/11.8 wt% Cu/In/Ga 36.5/48.7/14.8 wt% Cu/In/Ga 37.1/45.2/17.7 wt% Cu/In/Ga 45/45/10 at% Cu/In/Ga 47/42.4/10.6 at% Cu/ln/Ga 48/41.6/10.4 at% Cu/In/Ga 49/40.8/10.2 at% Cu/In/Ga 50/40/10 at% Cu/In/Ga/Na 34.6/21.6/43.8/0.3 Cu/In/Ga/Na 34.6/51.6/13.5/0.3 wt% Cu/In/Ga/Na 34.87/51.27/11.36/2.5 wt% Cu/In/Ga/Se 17/17/16/50 at% Cu/In/Ga/Se 83/10/5/2 wt% Cu/In/Ga/Se 84/10/5/1 wt% Cu/ln/Ga/Se 96.0/1.1/0.4/2.5 99.5% Cu/In/GaO2 Cu/In/Na 57/38/5 wt% Cu/ln/Sn 88/10/2 at% Cu/In/Te2 Cu/In48/52 at% Cu/La 51.5/48.5 wt% Cu/La 80/20 wt% Cu/La 82/18 wt% Cu/La 85.7/14.3 at% Cu/La 91/9 at% Cu/Li 80/20 at% Cu/Li 80/20 wt% Cu/Li 87.5/12.5 wt% Cu/Li 97.3/2.7 wt% Cu/Mg 84/16 wt% Cu/Mg 95/5 at% Cu/Mg 97/3 at% Cu/Ma 98.2/1.8 wt% Cu/Mq 98.8/1.2 wt% Cu/Mg 98/2 wt% Cu/Mg 99/1 at% Cu/Mn 50/50 at% Cu/Mn 80/20 at%

Cu/Mn 83/17

Cu/Mn 86/14 Cu/Mn 88/12 at% Cu/Mn 90/10 Cu/Mn 96/4 at% Cu/Mn 99.5/0.5 at% Cu/Mn 99.75/0.25 at% Cu/Mn 99/1 at% Cu/Mn 99/1 wt% Cu/Mn/Ga alloy Cu/Mn/Ni 86/11.4/2.6 wt% Cu/Mo 50/50 wt% Cu/Nb copper-nickel sputtering targets, constantan sputtering targets Cu/Ni 20/80 wt% Cu/Ni 40/60 wt% Cu/Ni 47/53 at% Cu/Ni 48/52 wt% Cu/Ni 50/50 at% Cu/Ni 52/48 wt% Cu/Ni 55/45 at% Cu/Ni 55/45 wt% Cu/Ni 56/44 wt% Cu/Ni 60/40 wt% Cu/Ni 70/30 Cu/Ni 80/20 wt% Cu/Ni 84:16 at% Cu/Ni 85/15 wt% Cu/Ni 90.7/9.3 wt% Cu/Ni 90/10 Cu/Ni 97.2/2.8 wt% Cu/Ni/Fe 60/20/20 wt% Cu/Ni/Mn/Fe 53.8/44.2/1.5/0.5 copper-palladium sputtering targets Cu/Pd 39/61 wt% Cu/Pd 44/56 wt% Cu/Pd 80/20 at% Cu/Pd/Ag 1.7/0.9/98 wt% Cu/Pt 27/73 wt% Cu/Pt 3/1 at% Cu/Pt/Ag 1.7/0.9/97.4 wt% Cu/Ru 50/50 area % Cu/Ru 80/20 at% Cu/Sc 1/1 at% Cu/Se 50/50 Cu/Si 1:1 at% Cu/Si 3:1 at% Cu/Si 98/2 copper-tin sputtering targets Cu/Sn 2/1 at% Cu/Sn 34.9/65.1 wt% Cu/Sn 6/5 Cu/Sn 85/15 wt% Cu/Sn 88/12 wt% Cu/Sn 89/11 wt%

Cu/Sn 99/1 at% Cu/Sn 99/1 at% 99.995% Cu/Ta 10.5/89.5 wt% Cu/Ta 13.1/86.9 wt% Cu/Ta 13.1/89.5 wt% Cu/Ta 15.9/84.1 wt% Cu/Ta 26/74 wt% Cu/Ta 3.8/96.4 wt% Cu/Ta 34.5/65.5 wt% Cu/Ta 44/56 wt% Cu/Ta 44/56 wt% Cu/Ta 5.8/94.2 wt% Cu/Ta 58.4/41.6 wt% Cu/Ta 76/24 wt% Cu/Ta 8.1/91.9 wt% Cu/Ta 8/92 wt% Cu/Te 99/1 wt% Cu/Ti 45/55 at% Cu/Ti 50/50 at% Cu/Ti 73/27 at% Cu/Ti 75/25 wt% Cu/Ti 95/5 at% Cu/Ti 99/1 at% Cu/Ti/Aq 35.3/1.7/63 wt% Cu/Ti/Ta 97.5/2.375/0.125 at% 95% Cu/Ti/Ta 97.5/2.375/0.125 at% 99.995% Cu/V 70/30 at% Cu/W 25.7/74.3 wt% Cu/W 34.1/65.9 wt% Cu/W 44.6/55.4 wt% Cu/W 50/50 at% Cu/W 58/42 wt% Cu/W 75.7/24.3 wt% Cu/Zn 25/75 wt% Cu/Zn 49.3/50.7 wt% Cu/Zn 52/48 wt% Cu/Zn 70/30 wt% Cu/Zn 82/18 wt% Cu/Zn 98/2 wt% Cu/Zn/Al 76.3/16.8/6.9 wt% Cu/Zn/Sn 38/24/38 wt% Cu/Zr 50/50 at% Cu₂O Cu2Te CuGa CuGa2 CulnGa CuInSe2 CuNb3 CuO CuSe CuSe2 CuTa3

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D
Dope Fe/Ta w/Cr
Dy
Dy/Ho/Tm
Dy/Sc 50/50 at%
Dy1Fe4Ga1
Е
Er
Er/Ti 95/5 at%
Er/Ti 95/5 at%
Er2O3/SiO2
Eu
EuS
F-117
Fabmate liners
iron sputtering targets
Fe
iron-aluminum sputtering targets
Fe/Al 50/50 at%
Fe/Al 65/35 wt%
Fe/Al 65/35 wt% 5%
Fe/Al 67.4/32.6 wt%
Fe/Al 75/25 at%
Fe/Al 75/25 wt%
Fe/Al 82.5/17.5 wt%
Fe/Al 86.1/13.9 wt%
Fe/Al 89.2/10.8 wt%
Fe/Al 90/10 wt%
Fe/Al 92.1/7.9 wt%
Fe/Al 94.9/5.1 wt%
Fe/AI 95/5 wt%
Fe/Al 96.5/3.5 wt%
Fe/Al 97.5/2.5 wt%
Fe/Al 98.5/1.5 wt%
Fe/Al 98/2 wt%
Fe/Al 99.5/0.5 wt%
Fe/Al 99/1 wt%
Fe/Al/Cr 77/12/11 wt%
Fe/Al/Mo 80.5/16/3.5 wt%
Fe/Al/Si 85/5.5/9.5 wt%
Fe/Au 50/50 at%
iron-boron sputtering targets
Fe/B 3:1 at%
Fe/B 75/25 at%
Fe/B 80/20 at%
Fe/B 80/20 wt%
Fe/B 83.8/16.2 wt%
Fe/B 85/15 at%
Fe/B 88.6/11.4 wt%
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Fe/B 92.3/7.7 wt% Fe/B 95.4/4.6 wt% Fe/B 95.4/4.6t% Fe/B 96.1/3.9 wt% Fe/B 96.7/3.3 wt% Fe/B 97.9/2.1 wt% Fe/B/Si 77.5/15/7.5 at% Fe/B/Si 77.5/15/7.5 at% Fe/B/Si 82/17/1 at% Fe/B/Si 92.1/3.4/4.5 wt% Fe/B/Si 92.1/3.4/4.5 wt% Fe/B/Si/C 94.4/3/2.1/0.5 wt% Fe/B/Ta 36.8/3.6/59.6 wt% Fe/B/Ta 63.6/2.1/34.3 wt% Fe/B/Zr 50/25/25 at% Fe/B/Zr 75/12.5/12.5 at% Fe/B/Zr/Nb/Cu 85/7.2/3.4/3.4/1 at% Fe/C 92/8 wt% Fe/C 94/6 wt% Fe/C 95.7/4.3 wt% Fe/C 98/2 Fe/Ce 88/12 at% iron-cobalt sputtering targets Fe/Co 1:1 at% Fe/Co 19/81 wt% Fe/Co 2/1 at% Fe/Co 20/80 wt% Fe/Co 24.8/75.2 at% Fe/Co 40/60 at% Fe/Co 40/60 wt% Fe/Co 48.7/51.3 wt% Fe/Co 50/50 at% Fe/Co 50/50 wt% Fe/Co 50:50 at% Fe/Co 52/48 wt% Fe/Co 55/45 at% Fe/Co 55/45 at% Fe/Co 58.7/41.3 wt% Fe/Co 60/40 at% Fe/Co 60/40 wt% Fe/Co 63.8/36.2 wt% Fe/Co 65/35 at% Fe/Co 65/35 wt% Fe/Co 68.9/31.1 wt% Fe/Co 70/30 at% Fe/Co 71.1/28.9 wt% Fe/Co 75/25 at% Fe/Co 80/20 at% Fe/Co 80/20 wt% Fe/Co 85/15 at% Fe/Co 90/10 at% Fe/Co 90/10 wt% Fe/Co 95/5 at% Fe/Co 95/5 wt%

Fe/Co 97.9/2.1 wt%

Fe/Co/Al 2:1:1 at%

Fe/Co/Au

Fe/Co/B 60/20/20 at%

Fe/Co/B/Si 70/8/10/12 at%

Fe/Co/B/Ta 49.1/8.7/2.4/39.8 wt%

Fe/Co/B/Ta 52/18.3/1.7/28 wt%

Fe/Co/B/Zr 60.4/21.2/2/16.4 wt%

Fe/Co/B/Zr 61.2/10.8/3/25 wt%

Fe/Co/C 43.1/48.8/6.5

Fe/Co/C 43.9/49.6/6.5 wt%

Fe/Co/C 57.6/38.4/4 wt%

Fe/Co/C/Ti 43.1/48.8/6.5/1.6

Fe/Co/C/Ti 43.5/49.2/6.5/0.8 wt%

Fe/Co/C/Ti/B 43.1/48.8/6.5/1.6/0.02 wt%

Fe/Co/C/Ti/B 43.1/48.8/6.5/1.6/0.1 wt%

Fe/Co/C/Ti/B 43.1/48.8/6.5/1.6/0.1 wt%

Fe/Co/C/Ti/Cu 56.7/37.8/4.5/0.5/0.5 wt%

Fe/Co/C/Ti/Sn 41.9/50/6.5/.8/.8 wt%

Fe/Co/Cr/B 33/17/37/13 at%

Fe/Co/Cr/Ni 44/40/11/5 at%

Fe/Co/Cr/Ni 44/40/11/5 wt%

Fe/Co/Ga 36.8/38.8/24.4 wt%

Fe/Co/Ga 54.2/6.8/39 wt%

Fe/Co/Ga 58.7/7/34.3 wt%

Fe/Co/Gd 40/40/20 wt%

Fe/Co/Mo

Fe/Co/Ni 30/50/20 wt%

Fe/Co/Ni 52/6/42 wt%

Fe/Co/Ni/Ta 28.6/10/10/51.4 wt%

Fe/Co/Ni/Zr/Nb/B

Fe/Co/Ta 37/46/17 at%

Fe/Co/Ta 58/25/17 at%

Fe/Co/V 49.5/49.5/1 at%

Fe/Co/V 49/49/2 wt%

Fe/Co/Zr/B 83.6/4.4/8.0/4 at%

Fe/Co/Zr/B/Cu

Fe/Cr 68.2/31.8 wt%

Fe/Cr 71.5/28.5 wt%

Fe/Cr 75/25 wt%

Fe/Cr 80/20 wt%

Fe/Cr 83/17 wt%

Fe/Cr/Al 78/11/11 wt%

Fe/Cr/Al/Y 69.5/20/9/1.5 wt%

Fe/Cr/Al/Y 70/23/6.5/0.5 wt%

Fe/Cr/Mo/B/Er 48/15/15/14/6/2 at%

Fe/Cr/Mo/Er/C/B 48/15/14/2/15/6 wt%

Fe/Cr/Nb 70/25/5 wt%

Fe/Cr/Nb 72/25/3 wt%

Fe/Cr/Nb 74/25/1 wt%

Fe/Cu 50/50 wt%

Fe/Cu 95.5/4.5

Fe/Cu 97.7/2.3

Fe/Dy/Tb (Dy7/Tb3)0.3/Fe/0.7

Fe/Dv/Tb 67/24/9 at% iron-gallium sputtering targets Fe/Ga 50/50 at% Fe/Ga 60/40 at% Fe/Ga 66/34 at% Fe/Ga 7:3 at% Fe/Ga 70/30 at% Fe/Ga 71/29 at% Fe/Ga 73/27 Fe/Ga 73/27 wt% Fe/Ga 75.1/24.9 wt% Fe/Ga 75/25 at% Fe/Ga 76.2/23.8 wt% Fe/Ga 77.3/22.7 wt% Fe/Ga 77.35/22.65 wt% Fe/Ga 79.6/20.4 wt% Fe/Ga 79/21 at% Fe/Ga 81/19 at% Fe/Ga 83/17 at% Fe/Ga 86/14 at% Fe/Ga 95/5 at% Fe/Gd 20/80 at% Fe/Gd 20/80 wt% Fe/Gd 30/70 at% Fe/Gd 40/60 at% Fe/Gd 5/95 wt% Fe/Gd 50/50 at% Fe/Gd 50/50 wt% Fe/Gd 60/40 at% Fe/Gd 70/30 at% Fe/Gd 76.2/23.8 wt% Fe/Gd 80/20 wt% Fe/Gd 87.1/12.9 wt% Fe/Gd 95/5 wt% Fe/Gd 97/3 wt% Fe/Gd 99/1 wt% Fe/Hf 60.4/39.6 wt% Fe/Hf 85/15 at% Fe/Hf 88/12 at% Fe/Hf/B 63.9/34/2.1 wt% Fe/Hf/Ta 23.7/37.9/38.6 wt% Fe/Hf/Ta 48.2/25.7/26.1 wt% Fe/Hf/Zr 50/25/25 at% Fe/Hf/Zr 75/12.5/12.5 at% Fe/Mg 70/30 at% Fe/Mg 80/20 at% Fe/Mg 90/10 at% iron-manganese sputtering targets Fe/Mn 1:1 at% Fe/Mn 40.4/59.6 wt% Fe/Mn 50% at. Fe/Mn 50.4/49.6 wt% Fe/Mn 50/50 at% Fe/Mn 50/50 wt%

Fe/Mn 50/50 wt% Fe/Mn 54.4/45.6 wt% Fe/Mn 80.3/19.7 wt% Fe/Mn 80/20 wt% Fe/Mn 90.2/9.8 wt% Fe/Mn 95.1/4.9 wt% Fe/Mn/Al/Si 69/25/3/3 wt% Fe/Mn/C 92.3/6.7/1 Fe/Mn/Pd 79.9/20/0.1 wt% Fe/Mo 50/50 at% iron-nickel sputtering targets Fe/Ni 1:1 at% Fe/Ni 15/85 at% Fe/Ni 19/81 wt% Fe/Ni 20/80 at% Fe/Ni 20/80 wt% Fe/Ni 25/75 at% Fe/Ni 3:1 Fe/Ni 45/55 at% Fe/Ni 48.8/51.2 wt% Fe/Ni 50/50 at% Fe/Ni 50/50 wt% Fe/Ni 51/49 at% Fe/Ni 60/40 at% Fe/Ni 62.8/37.2 wt% Fe/Ni 64/36 WT%, Fe/Ni 71.5/28.5 at% Fe/Ni 80/20 at% Fe/Ni 81/19 wt% Fe/Ni 97.9/2.1 wt% Fe/Ni/C 33.1/61.4/5.5 wt% Fe/Ni/C 33.3/61.9/4.8 wt% Fe/Ni/C 47.25/47.25/5.5 wt% Fe/Ni/C 47.6/47.6/4.8 wt% Fe/Ni/C 47.9/47.9/4.2 wt% Fe/Ni/Co 15:65:20 at% Fe/Ni/Co 18:76:6 at% Fe/Ni/Co 52.7/29.8/17.5 wt% Fe/Ni/Co 52/42/6 wt% Fe/Ni/Co 60/20/20 at% Fe/Ni/Cr/Si/Mn/C 77/19/2.2/0.3/1/0.5 at% Fe/Ni/Mn/Al 1/1/1/1 Fe/Ni/Pt 19.9/10.5/69.6 wt% Fe/Ni/Pt 35/15/45 wt% Fe/Ni/Zn 66.7/26.6/6.7 at% Fe/Ni19/81 wt% iron-palladium sputtering targets Fe/Pd 50/50 at% Fe/Pd 50/50 wt% Fe/Pd 51:49 at% Fe/Pd 52/48 at% Fe/Pd 53:47 at% Fe/Pd 55/45 at% Fe/Pd 55/45 wt%

Fe/Pd 65/35 at% Fe/Pd 67.7/32.3 wt% Fe/Pd 68/32 at% Fe/Pd 69.5:30.5 at% Fe/Pd 70/30 at% Fe/Pd 72/28 at% Fe/Pd 80/20 wt% Fe/Pd 82.5/17.5 wt% Fe/Pd/Pt 52/17/31 at% Fe/Pr/Nb/B 78/18.5/2.4/1.1 wt% iron-platinum sputtering targets Fe/Pt 1:1 at% Fe/Pt 22.3/77.7 wt% Fe/Pt 25.9/74.1 wt% Fe/Pt 45/55 at% Fe/Pt 48:52 at% Fe/Pt 50/50 at% Fe/Pt 50/50 at% Fe/Pt 52/48 at% Fe/Pt 53.4/46.6 wt% Fe/Pt 53/47 at% Fe/Pt 54/46 at% Fe/Pt 55/45 at% Fe/Pt 65/35 at% Fe/Pt 7/3 at% Fe/Pt 72/28 wt% Fe/Pt/Ag 24.4/72/3.6 wt% Fe/Pt/Cu 18.7/73.4/8 wt% Fe/Pt/Pd 53/23.5/23.5 at% Fe/Pt/Rh 50/25/25 at% Fe/Pt/Rh 50/40/10 at% Fe/Pt/Rh 50/45/5 at% Fe/Pt/Zr 28.3/69.3/2.4 wt% Fe/Rh 1:1 at% Fe/Rh 50/50 at% Fe/Rh/lr 47.5/47.5/5 at% Fe/Rh/Pd 47:47:6 at% Fe/Ru/Si/Ga 68.1/14.6/18.6/8.7 wt% iron-silicon sputtering targets Fe/Si 75/25 wt% Fe/Si 82.3/17.7 wt% Fe/Si 85.6/14.4 wt% Fe/Si 88.8/11.2 wt% Fe/Si 88/12 at% Fe/Si 88/12 at% Fe/Si 91.9/8.1 wt% Fe/Si 93.5/6.5 wt% Fe/Si 93/7 at% Fe/Si 94.7/5.3 wt% Fe/Si 97/3 at% Fe/Si 99.5/0.5 at% Fe/Si/Al 85/10/5 wt% Fe/Si/Al/Hf 84/9.5/5.5/1.0 Fe/Si/B 72.5/14.5/13 at%

Fe/Si/B 75/15/10 at% Fe/Si/B 78/13/9 at% Fe/Si/B 82/1/17 at% Fe/Si/B/Nb/Cu Fe/Si/B/Nb/Cu 73.5/13.5/6/3/1 Fe/Si/B/Nb/Cu 73.5/13.5/9/3/1at% Fe/Si/Cu/B/Nb 73.5/15.5/1/7/3 at% Fe/SiO2 25/75 at% Fe/SiO2 50:50 at% Fe/SiO2 60:40 at% Fe/SiO2 70:30 at% Fe/SiO2 80:20 at% Fe/SiO2 90:10 at% Fe/Sm 18 at% Fe/Sm 30 at% Fe/Sm 89.474/10.526 at% Fe/Sm/B 61/38/1 at% Fe/Ta 48.1/51.9 wt% Fe/Ta 78/22 wt% Fe/Ta 82.9/17.1 wt% Fe/Ta 85.4/14.6 wt% 5% 1 Fe/Ta 85/15 at% Fe/Ta 88.1/11.9 wt% Fe/Ta 90/10 at% Fe/Ta 93.8/6.2 wt% Fe/Ta 95/5 at% Fe/Ta/C 69.5/28.5/2 wt% Fe/Ta/C 72.1/24.6/3.3 wt% Fe/Tb 2/1 at% Fe/Tb 33/66 at% Fe/Tb 34.5/65.5 wt% Fe/Tb 34.5/65.5 wt% Fe/Tb 50/50 at% Fe/Tb 55/45 at% Fe/Tb 60/40 Fe/Tb 76/24 wt% Fe/Tb 80/20 at% Fe/Tb 81:19 at% Fe/Tb 83:17 at% Fe/Tb 85:15 at% Fe/Tb 87/13 wt% Fe/Tb/Co 65/22/13 at% Fe/Tb/Co 65/25/10 at% Fe/Tb/Co 69/23/8 wt% Fe/Tb/Co 69/23/8 wt% Fe/Ti 50/50 at% Fe/Ti 58.8/41.2 wt% Fe/Ti 75/25 wt% Fe/Ti 77.8/22.2 wt% Fe/Ti 82.3/17.7 wt% Fe/Ti 86.9/13.1 wt% Fe/Ti 91.3/8.7 wt% Fe/Ti 95.7/4.3 wt% Fe/V 4:1

Fe/V 50/50 at% Fe/V 65/35 at% Fe/V 7:3 Fe/V 81.6/18.4 wt% Fe/V 85/15 wt% Fe/V 86.2/13.8 wt% Fe/V 90.9/9.1 wt% Fe/V 91/9 wt% Fe/V 92/8 at% Fe/V 95.5/4.5 wt% Fe/V 95/5 wt% Fe/V 98.2/1.8 wt% Fe/V 98/2 wt% Fe/V/Co/Si/Mn/C Fe/Y 1:1 at Fe/Y 62.5/37.5 wt% Fe/Zn 70/30 at% Fe/Zn 75/25 at% Fe/Zn 80/20 at% Fe/Zn 85/15 at% Fe/Zn 90/10 at% Fe/Zn 95/5 at% Fe/Zn 97.7/2.3 wt% Fe/Zr 71/29 wt% Fe/Zr 75/25 at% Fe/Zr 90/10 at% Fe/Zr 91:9 at% Fe/Zr/B 81.4/16.6/2 wt% Fe/Zr/B 87.3/11.5/1.2 wt% Fe/Zr/B/Ag 85.8/11.3/1/1.9 wt% Fe/Zr/B/Cu 86/7/6/1 at% Fe/Zr/Nb/B/Cu Fe14Nd2B1 at% Fe17Sm2 Fe2(Tb/Dy 0.27/0.73) Fe2(Tb0.27Dy0.73) Fe2(Tb0.8Dy0.2) Iron oxide sputtering targets Fe2O3 Fe2O3/BaO 6/1 at% Fe2O3/SrO 6/1 at% Fe3O4 Fe3P Fe7S8 FeC FeMn 50/50 at% FeS FeS2 FeSi2 G

Ga 99.99+% Ga/As

Ga/Cu 60/40 at% Ga/Cu 90/10 at% Ga/Gd 70/301 at% Ga/Gd 80/20 at% Ga/Gd 90/10 at% Ga/Gd 95/5 at% Ga/Gd 99.9/0.1 at% Ga/Gd 99/1 at% Ga/In/Se 10/40/50 wt% Ga/In/Se 25/25/50 wt% Ga/Na 39/22 at% Ga/Na 60/40 Ga/Na 72/28 at% Ga/Na 78/28 Ga/Na 92.4/7.6 wt% Ga/Na 94.5/5.5 wt% Ga/Ni 54.3/45.7 wt% Ga/Sb 36.4/63.6 wt% Ga/Sb 50/50 at% Ga/Sb/Te 20/50/30 at% Ga/Se 42/58 wt% Ga/Zn 50/50 wt% Gallium oxide sputtering targets Ga2O3 Ga2O3/In2O3/SnO2 105:20:18 mole % Ga2Se3 Ga4Na Ga7Na3 Ga-based F117 Alloy Galistan GaN GaP Gd Gd/B 93.6/6.4 wt% Gd/B 95.6/4.4 wt% Gd/B 97.1/2.9 wt% Gd/Ce 11.1/88.9 wt% Gd/Co 40/60 at% Gd/Co 70/30 at% Gd/Er/Si 50/5.56/44.4 at% Gd/Er/Si 50/5.6/44.4 at% Gd/Er/Si 50/5.6/44.4 at% Gd/Fe 45/55 at% Gd/Sc 50/50 at% Gd/Si/Ge 5/2/2 at% Gd/Si/Sn 55.6/33.3/11.1 at% Gd/Tb 1:1 at% Gd/Y 1:1 at% 99.8% Ge Ge/Au 64.3/35.7 wt% Ge/Au 83/17 at% Ge/B 99.95/0.05 at% Ge/Sb 15/85 at% Ge/Sb 9.5/90.5 wt%

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Ge/Sb/Aq/Te
Ge/Sb/Si 9.2/89.5/1.3 wt%
germanium-antimony-tellurium sputtering targets
Ge/Sb/Te 1/2/4 at%
Ge/Sb/Te 14.1/23.7/62.1 wt%
Ge/Sb/Te 2/2/5 at%
Ge/Sb/Te 22.22:22.22:55.56 at%
Ge/Sb/Te 22/22/56 at%
Ge/Sb/Te 4/1/5 at%
Ge/Sb/Te w/15 %SiO2
Ge/Sb/Te w/30 %SiO2
Ge/Se 30/70
Ge/Se/Te 25/25/50 at%
Ge/Si 1:1
Ge/Si 2:8 at%
Ge/Si 85/15 at%
Ge/Sn 50/50 wt%
germanium-tellurium sputtering targets
Ge/Te 1:1 at%
Ge/Te 50/50 at%
Ge/Te 90/10 wt%
Ge/Te 95/5 wt%
Ge2Sb2Te5
germanium-antimony-telluride sputtering targets
Ge2Sb2Te5 (w 10% Si)
Ge2Sb2Te5 (w 15% Si)
Ge2Sb2Te5 (w 30% Si)
Ge2Sb2Te5 at%
Ge2Sb2Te5 doped w/50% Si
Ge2Sb2Te5 doped w/70% Si
Ge2Te
Ge3N4
GeO2
GeSe2
GeTe2
GST
Н
                               hafnium sputtering targets
Hf
Hf/Cr 88/2 at%
Hf/Cr 90/10 at%
Hf/Cr 92/8 at%
Hf/Cr 94/6 at%
Hf/Cr 95/5 at%
Hf/Cr 96/4 at%
Hf/Cr 97/3 at%
Hf/Cr 98/2 at%
Hf/Cr 99/1 at%
Hf/Gd 90/10 at%
Hf/La 50/50 at%
Hf/La 60:40 at%
Hf/La 75/25 at%
Hf/Mo 50/50 at%
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Hf/Si 1/1 at%
Hf/Si 50/50 at%
Hf/Si 90/10 at%
Hf/Si 90/10 wt%
Hf/Si 95/5 wt%
Hf/Ta 20/80 wt%
Hf/Ta 25/75 wt%
Hf/Ta 25/75 wt%
Hf/Ta 40/60 wt%
Hf/Ta 50/50 at%
Hf/Ta 60/40 wt%
Hf/Ta 80/20 wt%
Hf/Ti 50/50 at%
Hf/Y 50/50 at%
Hf/Y 75/25 wt%
Hf/Y 75/25 wt%
Hf/Y 88/12 wt%
Hf/Zr 1:1 at%
Hf/Zr 88/12 wt% 99.8%
Hafnium oxide sputtering targets
HfO<sub>2</sub>
HfSi2
HfSi2 at%
Но
Indium sputtering targets, indium foils
In Oxide
In/Ag 97/3 wt%
In/Al 5/1 at%
In/Au 53.8/46.2 wt%
In/Bi 66.3/33.7 wt%
In/Cu 56/44 at%
In/Cu 59.7/40.3 wt%
In/Cu 64.4/35.6 wt%
In/Cu 73.1/26.9 wt%
In/Cu 75/25 wt%
In/Cu 85/15 wt%
In/Cu/Ga 1/1/1 at%
In/Ga 70/30 mol%
In/Ga/Cu 56/24/20 at%
In/Ga/Zn 1/1/1 at%
In/Na 50/50 at%
In/Na 56/44 at%
In/Na 80/20 at%
In/Na 95.23/4.77 wt%
In/Na 97.75/2.25 wt%
In/Pb 60/40 wt%
In/Pb 98/2 at%
In/Pd 53.9/46.1 wt%
In/Sb 48.5/51.5 wt%
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In/Sb 50/50 at%
In/Sb 50/50 wt%
In/Sb 55/45 wt%
In/Se 40/60 wt%
In/Se 57/43 wt%
In/Sn 39.2/60.8 wt%
In/Sn 48.3/51.7 at%
In/Sn 48.3/51.7 at%
indium-tin sputtering targets
In/Sn 50/50 wt%
In/Sn 51/49
In/Sn 52/48 wt%
In/Sn 90/10 at%
In/Sn 90/10 wt%
In/Sn 91/9 at%
In/Te 1/2
In/Y 3:1 at%
In/Zn 50/50 at%
In/Zn 65/35 at%
In/Zn 75/25 wt%
In/Zn 84.1/15.9 at%
In/Zn 84.1:15.9 at%
In/Zn 90/10 wt%
In/Zn 94/6 at%
In/Zn 95/5 at%
In/Zn 97.8/2.2 wt%
In/Zn 97/3 wt%
In/Zn/Al 2:6:1 at%
Indium oxide sputtering targets
In203
In2O3/Ga2O3/ZnO
In2O3/SnO
In2O3/ZnO 50/50 mol%
In2O3/ZnO 90/10 wt%
In2Se3
Inconel
Inconel 601
Iridium sputtering targets, iridium e-beam pellets
Iridium-manganese sputtering targets
Ir/Mn 1:1 at%
Ir/Mn 17/83 at%
Ir/Mn 2:8 at%
Ir/Mn 20/80 at%
Ir/Mn 22/78 at%
Ir/Mn 24/76 at%
Ir/Mn 25/75 at%
Ir/Mn 38.2/61.8 wt%
Ir/Mn 43.4/56.6 wt%
Ir/Mn 44/56 wt%
Ir/Mn 45.1/54.9 wt%
Ir/Mn 45.1/54.9 wt%
Ir/Mn 46.7/53.3 wt%
Ir/Mn 48.2/51.8 wt%
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Ir/Mn 49.7/50.3 wt%
Ir/Mn 52.5/47.5 wt%
Ir/Mn 53.3/46.6 wt%
Ir/Mn 53.3/46.7 wt%
Ir/Mn 55.1/44.9 wt%
Ir/Mn 57.6/42.4 wt%
Ir/Mn 62.2/37.8 wt%
Ir/Mn 78/22 wt%
Ir/Mn 80/20 at%
Ir/Mn 80/20 wt%
Ir/Mn/B 48.1/48.8/3.1 wt%
Ir/Mn/B 48.6/49.2/2.2 wt%
Ir/Mn/B 49.3/50/0.7 wt%
Ir/Mn/B 49/49.6/1.4 wt%
Ir/Pt 59.6/40.4 wt%
Ir/Re 70/30 wt%
Indium tin oxide sputtering targets
ITO 70/30
ITO 70/30 at%
ITO 90/10
IZO
IZO (In2O3/ZnO 78/22 wt%)
IZO 5/95
IZO 90/10 wt%
K
Kanthal
                               Lanthanum sputtering targets
La
La.6Sr.4Co.8Fe.2/O3
La/Ag 90/10 at%
La/Al 30/70 wt%
La/Al 83.7/16.3 wt%
La/Cu 66.6/33.3 at%
La/Cu 80/20 wt%
La/Fe/Si 7.14/81.7/11.14 at%
La/Mn 1:1 at%
La/Mn 50/50 at%
Lanthanum-nickel sputtering targets
La/Ni 1/5 at%
La/Ni 50/50 at%
La/Ni 55/45 at%
La/Ni 70.3/29.7 wt%
La/Ni 74.3/25.7 wt%
La/Ni 78/22 wt%
La/Ni/Fe 5/3/2 at%
La/Pb 3/97 at%
La/Si 1/1 at%
La/Si 50/50 at%
La/Sr 0.875/0.125 99%
La/Sr 70/30 at%
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La/Sr 80:20 at%
La/Sr 85/15 at%
La/Y 50/50 wt% 99.7%
La/Zr 1/1 at%
LaAl2O3
LaAlO3
LaB6
LaF3
LaFl2
Li
Li/Al 20.5/79.5 wt%
Li/Al 20.5/79.5 wt%
Li/Si 1/1
LiMn2O4
LiNiO2 at%
LM 14
Lu 99%
M
                              Magnesium sputtering targets
Ma
Magnesium-silver sputtering targets, Magnesium-silver e-beam pellets
Mg/Ag 10/1 wt%
Mg/Ag 90.9/9.1 wt%
Mg/Ag 90/10 at%
Mg/Ag 90/10 wt%
Mg/Ag 91/9 wt%
Mg/Ag 95/5 at%
Mg/Ag 95/5 wt%
Magnesium-aluminum sputtering targets
Mg/Al 1/1 at%
Mg/Al 22.1/77.9 wt%
Mg/AI 24/76 wt%
Mg/Al 26/74 wt%
Mg/Al 27.9/72.1 wt%
Mg/Al 28.8/71.2 wt%
Mg/Al 29.8/70.2 wt%
Mg/AI 30.7/69.3 wt%
Mg/Al 31.7/68.3 wt%
Mg/Al 32.7/64.3 wt%
Mg/Al 33.6/66.4 wt%
Mg/AI 34.6/64.4 wt%
Mg/AI 37.5/62.5 wt%
Mg/Al 70/30 at%
Mg/AI 90/10 wt%
Mg/Al 99.5/0.5 at%
Mg/Al 99.9/0.1 at%
Mg/Al 99.95/0.05 at%
Mg/Al 99.99/0.01 at%
Mg/Al 99/1 at%
Mg/Al/Li 92/4/4 wt%
Mg/Al/Zn 93/6/1 wt%
Mg/Bi 14.9/85.1 wt%
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Mg/Bi 21.3/78.7 wt%
Mg/Bi 31.8/68.2 wt%
Mg/Bi 51.1/48.9 wt%
Mg/Bi 68.8/31.2 wt%
Mg/Bi 85.1/14.9 wt%
Mg/Ca 18.7/81.7 wt%
Mg/Ca 85/15 at%
Mg/Ca 90/10 at%
Mg/Ca 95/5 at%
Mg/Ca 98/2
Mg/Ca 99/1
Mg/Ce 79.4/20.6 wt%
Mg/Co/Mo 99/0.75/0.25 at%
Mg/Cu 25/75 at%
Mg/Eu 97/3 at%
Mg/Fe 55:45 at%
Mg/Ga 99.5/0.5 at%
Mg/Ga 99.9/0.1 at%
Mg/Ga 99.95/0.05 at%
Mg/Ga 99.99/0.01 at%
Mg/Ga 99/1 at%
Mg/In 10/90 at%
Mg/In 10/90 at%
Mg/In 12.4/87.6 wt%
Mg/In 17.5/82.5 wt%
Mg/In 24.1/75.9 wt%
Mg/In 33.1/66.9 wt%
Mg/In 45.9/54.1 wt%
Mg/In 5/95 wt%
Mg/In 65.6/34.4 wt%
Mg/In 8.3/91.7 wt%
Mg/In 99.5/0.5 at%
Mg/In 99.9/0.1 at%
Mg/In 99.95/0.05 at%
Mg/In 99.99/0.01 at%
Mg/In 99/1 at%
Mg/Li 1/1 at%
Mg/Li 30/70 wt%
Mg/Li 50/50 wt%
Mg/Li 85/15 wt%
Mg/Mn 25/75 at%
Mg/Mn 50/50 at%
Mg/Mn 75/25 at%
Mg/Ni 10/90
Mg/Ni 15/85
Mg/Ni 20/80
Mg/Ni 25/75
Mg/Ni 38.3/61.7 wt%
Mg/Ni 5/95
Mg/Ni 70.7/29.3 wt%
Ma/Ni 75/25
Mg/Ni 80/20
Mg/Ni 85/15
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Mg/Ni 90/10

Ma/Ni 95/5 Mg/Pb 75/25 wt% Mg/Pb 80/20 wt% Mg/Pb 88/12 wt% Mg/Pb 95/5 wt% Mg/Sc 95/5 at% Mg/Si 2/1 at% Mg/Si 99.5/0.5 at% Mg/Si 99.9/0.1 at% Mg/Si 99.95/0.05 at% Mg/Si 99.99/0.01 at% Mg/Si 99/1 at% Mg/Sn 29/71 wt% Mg/Ti 70/30 wt% Mg/TI 95/5 at% Mg/Y 85/15 at% Mg/Y 95/5 at% Mg/Zn 15.7/84.3 wt% Mg/Zn 15.7/87.3 wt% Mg/Zn 99/1 wt% Mg/Zr 95/5 at% MgB2 MgC MgF2 Magnesium oxide sputtering targets MgO MgO/ZnO 10/90 MgO/ZnO 40/60 MgO/ZnO 60/40 Manganese sputtering targets Manganese-aluminum sputtering targets Mn/Al 40/60 at% Mn/Al 50/50 at% Mn/Al 60/40 at% Mn/Co 48.2/51.8 wt% Mn/Fe 54/46 wt% Mn/Fe 60/40 wt% Mn/Ga 44.1/55.9 wt% Mn/Ga 50/50 wt% Manganese-iridium sputtering targets Mn/Ir 22.2/77.8 wt% Mn/lr 4:1 at% Mn/lr 50.3/49.7 wt% Mn/lr 50/50 wt% Mn/lr 53.3/46.7 wt% Mn/lr 70/30 at% Mn/Ir 75/25 at% Mn/Ir 77/23 at% Mn/Ir 78/22 at% Mn/Ir 80/20 at% Mn/Ir 80/20 wt% Mn/Ir 80/20 wt% Mn/lr 83/17 at%

Mn/lr 86/14 at% Manganese-nickel sputtering targets Mn/Ni 55/45 at% Mn/Ni 60/40 wt% Mn/Ni 70/30 wt% Mn/Ni 75/25 at% Mn/Ni 80/20 wt% Mn/Ni 88/12 wt% Mn/Ni 89/11 wt% Mn/Ni/Cu 66/17/17 wt% Mn/Ni/Cu 91/5.7/3.3 wt% Mn/Ni/Fe 50/25/25 at% Mn/Pd 50/50 at% Manganese-platinum sputtering targets Mn/Pt 29.7/70.3 wt% Mn/Pt 31.5/68.5 wt% Mn/Pt 50/50 at% Mn/Pt 90/10 wt% Mn/Sb 31.1/68.9 wt% Mn/Sb 35.5/64.5 wt% Mn/Sb 50/50 at% Mn/Ti 87.5/12.5 at% Mn/Ti 87.5/12.5 at% Mn/V/AI 50/25/25 at% Mn2Ga2 Mn3Ga Molybdenum sputtering targets Mo 99.97% Molybdenum-chromium sputtering targets Mo/Cr 50/50 wt% Mo/Cr 80/20 at% Mo/Cr 80/20 wt% Mo/Cr 85/15 at% Mo/Cr 95/5 wt% Mo/Cr/In/Cu 84/15/0.8/0.2 at% Mo/Ge 75/25 at% Mo/Ge 83.3/16.7 wt% Mo/Nb 94/6 wt% Mo/Re 24/76 wt% Mo/Re 43.6/56.4 wt% Mo/Si 65/35 at% Mo/Si/Ni Mo/W 95/5 wt% Mo3Si Mo5Si3 MoO3 MoS₂ MoSi2 N N/Fe/W 89.5/9/1.5 wt%

Na/Zn 1/99 wt% Na/Zn 5/95 wt% **NaAISi NaCl** Niobium sputtering targets Nb Nb/Al 66.6/33.3 at% Nb/Al 67/33 at% Nb/Al 75/25 at% Nb/Au 70/30 wt% Nb/Co 50/50 at% Nb/Ge 75/25 at% Nb/Hf/Ti 89/10/1 wt% Nb/Mo 53/47 at% Nb/Mo 80/20 wt% Nb/Mo/Pd .64/.16/.2 Nb/Mo/Pd 64/16/20 wt% Nb/Mo/Pd 72/18/10 wt% Nb/Sn 70.1/29.9 wt% Niobium-titanium sputtering targets Nb/Ti 29.6/70.4 wt% Nb/Ti 40/60 at% Nb/Ti 50/50 Nb/Ti 60/40 at% Nb/Ti 60/40 wt% Nb/Ti 70/30 at% Nb/Ti 70/30 wt% Nb/Ti 79/21 wt% Nb/Ti 80/20 wt% Nb/Ti 82.3/17.7 wt% Nb/Ti 95/5 wt% Nb/V 50/50 at% Nb/Zr 75/25 wt% 200g Nb/Zr 99/1 wt% Nb2O3 Niobium oxide sputtering targets Nb2O5 Nb3Al at% Nb3Ge at% Nb3Sn Nd Nd/Fe/B 26.7/72.3/1 wt% Nd/Fe/B 27.9/71.1/1 wt% Nd/Ni 1/5 at% Nd/Tb/Co/Fe/B 3.25/1/5/72.75/18 at% Nd2Fe14B Nickel sputtering targets Ni Ni 200 Ni/Ag /0.1 wt% Ni/Ag 5/0.05 wt% Ni/Ag 99.9/0.1 wt% Ni/Ag 99.95/0.05 wt% Nickel-aluminum sputtering targets Ni/Al 50/50 at% Ni/AI 50/50 wt%

Ni/Al 51/49 at% Ni/Al 68.5/31.5 wt% Ni/Al 75/25 at% Ni/Al 86.7/13.3 wt% Ni/Al 86/14 at% Ni/Al 90/10 at% Ni/Al 93/7 wt% Ni/Al 95.1/4.9 wt% Ni/Al 97.6/2.4 wt% Ni/Al/Cr/Ti 51/46//2/1 at% Ni/Al/Hf 49.97/49.97/0.05 at% Ni/Al/Hf 51/48/1 at% Ni/Al/Hf 68.4/31.4/0.2 wt% Ni/Al/Hf 68.4/31.4/0.2 wt% Ni/Al/Pt 49/36/15 wt% Ni/Al/Pt/Hf 45.73/5.3/47.87/1.1 wt% Ni/Al/Si/Mn/Co 95.4/1.1/1.4/1.5/.7 wt% Ni/Al/Ti 51/48/1 at% Ni/Al/Ti 94.9:4.5:0.6 at% Ni/Al/Zr 51/48/1 at% Ni/B 92.7/7.3 wt% Ni/B 94.2/5.8 wt% Ni/B 95.6/4.4 wt% Ni/B 96.2/3.8 wt% Ni/B 96.9/3.1 wt% Ni/B 98/2 wt% Ni/B 99/1 wt% Ni/B/Si 82/17/1 at% Ni/C 1:1 at% Ni/C 75/25 at% Ni/C 99.9/0.1 wt% Ni/Ca 90/10 wt% Nickel-cobalt sputtering targets Ni/Co 24.9/75.1 wt% Ni/Co 25.1/74.9 wt% Ni/Co 33.3/66.7 wt% Ni/Co 49.9/50.1 wt% Ni/Co 50.1/49.9 wt% Ni/Co 50/50 at% Ni/Co 50/50 wt% Ni/Co 60/40 wt% Ni/Co 66.6/33.4 wt% Ni/Co 75.1/24.9 wt% Ni/Co 79.9/20.1 wt% Ni/Co 80/20 at% 99.995 Ni/Co 80/20 wt% Ni/Co 90/10 at% 99.995 Ni/Co 95/5 at% Ni/Co 97/3 at% Ni/Co 98.5/1.5 at% Ni/Co 99.4/0.6 wt% Ni/Co 99.5/0.5 at% Ni/Co 99.9/0.1 wt%

Ni/Co 99/1 at%

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Ni/Co/Cr/Al/Y 46.5/23/17/13/0.5 wt%
Ni/Co/Fe 20.6/20.7/58.7 wt%
Ni/Co/Fe 20/20/60 at%
Ni/Co/Fe 33/33/33 at%
Ni/Co/Fe 65.4/20.2/14.4 wt%
Ni/Co/Fe 65/20/15 at%
Ni/Co/Fe 66/18/16 at%
Ni/Co/Fe/B 10/10/62/18
Ni/Co/Fe/B 11.4/10.2/73.3/5.1 wt%
Ni/Co/Fe/B 11.4/7.6/75.9/5.1 wt%
Ni/Co/Fe/B 13.9/10.1/7.9/5.1 wt%
Ni/Co/Fe/B 14.7/34.3/46.5/4.5 wt%
Ni/Co/Fe/B 14.9/34.8/47.1/3.2 wt%
Ni/Co/Fe/B 18.9/48.4/18.3/4.4 wt%
Ni/Co/Fe/B 19.3/58.0/18.3/4.4 wt%
Ni/Co/Fe/B 19.5/39.1/37.0/4.4 wt%
Ni/Co/Fe/B 19.5/58.8/18.6/3.1 wt%
Ni/Co/Fe/B 19.6/29.4/46.5/4.5 wt%
Ni/Co/Fe/B 19.6/49.2/28.0/3.2 wt%
Ni/Co/Fe/B 19.7/39.6/37.5/3.2 wt%
Ni/Co/Fe/B 19.8/29.8/47.1/3.2 wt%
Ni/Co/Fe/B 24.5/24.5/46.5/4.5 wt%
Ni/Co/Fe/B 24.8/24.9/47.1/3.2 wt%
Ni/Co/Fe/B 29.0/38.9/27.6/4.5 wt%
Ni/Co/Fe/B 29.2/29.3/37/4.5 wt%
Ni/Co/Fe/B 29.3/19.6/46.5/4.5 wt%
Ni/Co/Fe/B 29.3/49.0/18.6/3.1 wt%
Ni/Co/Fe/B 29.3/49.0/18.6/3.1 wt%
Ni/Co/Fe/B 29.4/39.4/28.0/3.2 wt%
Ni/Co/Fe/B 29.6/29.7/37.5/3.2 wt%
Ni/Co/Fe/B 29.7/19.9/47.1/3.2 wt%
Ni/Co/Fe/B 33.9/34.0/27.6/4.5 wt%
Ni/Co/Fe/B 34.2/14.7/46.5/4.5 wt%
Ni/Co/Fe/B 34.3/34.5/28.0/3.2 wt%
Ni/Co/Fe/B 34.7/14.9/47.2/3.2 wt%
Ni/Co/Fe/B 38.5/38.7/18.3/4.4 wt%
Ni/Co/Fe/B 38.7/29.2/27.6/4.5 wt%
Ni/Co/Fe/B 38.9/19.5/37/4.5 wt%
Ni/Co/Fe/B 39.1/39.2/18.6/3.1 wt%
Ni/Co/Fe/B 39.2/29.6/28.0/3.2
Ni/Co/Fe/B 39.5/19.8/37.5/3.2 wt%
Ni/Co/Fe/B 48.2/29.0/18.3/4.4 wt%
Ni/Co/Fe/B 48.4/19.5/27.7/4.4 wt%
Ni/Co/Fe/B 49.1/19.7/28.0/3.2 wt%
Ni/Co/Fe/B 8.9/10.2/75.9/5 wt%
Ni/Co/Fe/B 9.6/67.6/18.3/4.4 wt%
Ni/Co/Fe/B 9.8/68.5/18.6/3.1 wt
Ni/Co/Fe/B/Hf 6.2/9.3/70/1.9/12.6 wt%
Ni/Co/Fe/B/Hf 6/6/70/9/9
Ni/Co/Fe/B/Hf 6/9/65/10/10
Ni/Co/Fe/B/Hf 7.4/8.5/68.6/2.5/12.9 wt%
Ni/Co/Fe/B/Hf 7/7/70/8/8
Ni/Co/Fe/B/Ta 5.5/5.6/61.7/1.5/25.7 wt%
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Ni/Co/Fe/B/Zr 4.4/10.6/50.5/1.8/32.7 wt%

Ni/Co/Fe/B19.4/48.6/27.6/4.4 wt% Ni/Co/Fe/B48.8/29.4/18.6/3.2 wt% Ni/Co/Li 32.7/66.7/0.6 wt% Ni/Co/Mn/In 43/5/38/14 wt% Nickelchromium sputtering targets, nichrome sputtering targets, nichrome e-beam pellets Ni/Cr 40/60 wt% Ni/Cr 44:56 at% Ni/Cr 50/50 wt% Ni/Cr 53/47 wt% Ni/Cr 54/46 at% Ni/Cr 56/44 at% Ni/Cr 58/42 at% Ni/Cr 60/40 at% Ni/Cr 60/40 wt% Ni/Cr 60/40 wt% Ni/Cr 67.4/32.6 wt% Ni/Cr 70/30 wt% Ni/Cr 72.5/27.5 wt% Ni/Cr 79.2/19.8 wt% Ni/Cr 80/20 at% Ni/Cr 80/20 wt% Ni/Cr 83.4/16.6 wt% Ni/Cr 88/12 wt% Ni/Cr 90/10 at% Ni/Cr 90/10 wt% Ni/Cr 95/5 wt% Ni/Cr 97/3 at% 99.995% Ni/Cr 99.9/0.1 wt% Ni/Cr 99/1 at% 99.995% Ni/Cr/Al 67.4/22.3/10.3 wt% Ni/Cr/Al/Cu 75/20/2.5/2.5 wt% Ni/Cr/Al/Cu 75/202.5/2.5 wt% Ni/Cr/Al/Mn/Cu/Si 75/18/2.5/2.2/1.7/0.6 wt% Ni/Cr/Al/Si 56.6/37.9/4/1.5 wt% Ni/Cr/Al/Si 56.6/37.9/4/1.5 wt% Ni/Cr/Fe 45/25/30 wt% Ni/Cr/Fe 80/14/6 wt% (Inconel 600) Ni/Cr/Fe/Mn 40/25/30/5 Ni/Cr/Fe/Mn 45/25/20/10 wt% Ni/Cr/Fe/Nb/Ti 60/25/8/5/2 wt% Ni/Cr/Pt 83/7/10 wt% Ni/Cr/Si 47.5/47.5/5 Ni/Cr/Si 80/16/4 wt% Ni/Cr/Si/B/Fe Ni/Cr/Y 64.6/35/0.4 wt% Nickel-copper sputtering targets, constantan sputtering targets Ni/Cu 33.22/66.78 wt% Ni/Cu 45/55 wt% Ni/Cu 50/50 at% Ni/Cu 50/50 wt% Ni/Cu 51/49 wt% Ni/Cu 53/47 wt% Ni/Cu 54.05/45.96 wt%

Ni/Cu 55/45 at%

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Ni/Cu 60.1/39.9 wt%
Ni/Cu 60.1/39.9 wt%
Ni/Cu 60/40 wt%
Ni/Cu 63.2/36.8 wt%
Ni/Cu 65/35 at%
Ni/Cu 67/33 wt%
Ni/Cu 69/31 wt%
Ni/Cu 70/30 wt%
Ni/Cu 78.7/21.3 wt%
Ni/Cu 80/20 wt%
Ni/Cu 85/15 wt%
Ni/Cu 90/10 at%
Ni/Cu 90/10 wt%
Ni/Cu 95/5 at%
Ni/Cu 95/5 wt%
Ni/Cu 98/2 at%
Ni/Cu 99.9/0.1 wt%
Ni/Cu 99/1
Ni/Cu/Mn 44/55/1 wt%
Nickel-iron sputtering targets, permalloy sputtering targets
Ni/Fe 19% wt.
Ni/Fe 20/80 at%
Ni/Fe 20/80 wt%
Ni/Fe 34.5/65.5 wt%
Ni/Fe 4:1 at (81/19 wt%)
Ni/Fe 40/60 wt%
Ni/Fe 45/55 wt%
Ni/Fe 48.8/51.2 wt%
Ni/Fe 50/50 at%
Ni/Fe 50/50 wt%
Ni/Fe 50/50 wt%
Ni/Fe 52/48 wt%
Ni/Fe 52/48 wt%
Ni/Fe 60/40 at%
Ni/Fe 61.2/38.8 wt%
Ni/Fe 78/22 wt%
Ni/Fe 78/22 wt%
Ni/Fe 79.8/20.2 wt%
Ni/Fe 80.79/19.21 wt%
Ni/Fe 80.8/19.2 wt%
Ni/Fe 80.8/19.2 wt%
Ni/Fe 80/20 at%
Ni/Fe 80/20 at%
Ni/Fe 80/20 wt%
Ni/Fe 80/20 wt%
Ni/Fe 81.8/18.2 wt%
Ni/Fe 81.8/18.2 wt%
Ni/Fe 81/19 at%
Ni/Fe 81/19 at%
Ni/Fe 81/19 wt%
Ni/Fe 81/19 wt%
Ni/Fe 83.2/16.8 wt%
Ni/Fe 83.2/16.8 wt%
Ni/Fe 84/16 wt%
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Ni/Fe 85/15 at%
Ni/Fe 86/14 at%
Ni/Fe 88/12 wt%
Ni/Fe 89/11 wt%
Ni/Fe 90/10 wt%
Ni/Fe)82.5/B17.5 at%
Ni/Fe/Al 34.2/7.6/58.2 wt%
Ni/Fe/Al 55.8/12.5/31.7 wt%
Ni/Fe/Al 65/15/20 at%
Ni/Fe/Al 70.8/15.8/13.4 wt%
Ni/Fe/B
Nickel-iron-boron sputtering targets
Ni/Fe/B 19.2/73.2/7.6 wt%
Ni/Fe/B 19.6/74.4/6 wt%
Ni/Fe/B 19.9/75.6/4.5 wt%
Ni/Fe/B 20.1/76.6/3.3 wt%
Ni/Fe/B 20.4/77.5/2.1 wt%
Ni/Fe/B 20.6/78.4/1 wt%
Ni/Fe/B 28.7/63.7/7.6 wt%
Ni/Fe/B 29.2/64.8/6 wt%
Ni/Fe/B 29.7/65.8/4.5 wt%
Ni/Fe/B 30.1/66.7/3.2 wt%
Ni/Fe/B 30.4/67.5/2.1 wt%
Ni/Fe/B 30.8/68.2/1 wt%
Ni/Fe/B 37.5/37.5/25 at%
Ni/Fe/B 38.1/54.4/7.5 wt%
Ni/Fe/B 38.7/55.3/6 wt%
Ni/Fe/B 38.8/55.3/5.9 wt%
Ni/Fe/B 39.3/56.2/4.5 wt%
Ni/Fe/B 39.9/56.9/3.2 wt%
Ni/Fe/B 39.9/56.9/3.2 wt%
Ni/Fe/B 40.4/57.6/2 wt%
Ni/Fe/B 40.8/58.2/1 wt%
Ni/Fe/B 40/40 20 at%
Ni/Fe/B 47.4/45.1/7.5 wt%
Ni/Fe/B 48.2/45.9/5.9 wt%
Ni/Fe/B 48.9/46.6/4.1 wt%
Ni/Fe/B 48.9/46.6/4.5 wt%
Ni/Fe/B 49.6/47.2/3.2 wt%
Ni/Fe/B 50.2/47.8/2 wt%
Ni/Fe/B 50.7/48.3/1 wt%
Ni/Fe/B 56.6/35.9/7.5 wt%
Ni/Fe/B 57.6/36.5/5.9 wt%
Ni/Fe/B 57.6/36.5/5.9 wt%
Ni/Fe/B 58.4/37.1/4.5 wt%
Ni/Fe/B 59.2/37.6/3.2 wt%
Ni/Fe/B 60.6/38.4/1 wt%
Ni/Fe/B 60/38/2 wt%
Ni/Fe/B 60/38/2 wt%
Ni/Fe/B 65.8/26.8/7.4 wt%
Ni/Fe/B 65/15/20 at%
Ni/Fe/B 66.9/27.3/5.8 wt%
Ni/Fe/B 67.9/27.7/4.4 wt%
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Ni/Fe/B 68.8/28/3.2 wt%

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Ni/Fe/B 69.6/28.4/2 wt%
Ni/Fe/B 70.4/28.7/0.9 wt%
Ni/Fe/Co 15/70/15 wt%
Ni/Fe/Co 40/20/40 wt%
Ni/Fe/Co 65.4/14.4/20.2 wt%
Ni/Fe/Co 65.6/19.2/15.2 wt%
Ni/Fe/Co 65/25/10 wt%
Ni/Fe/Co 76/18/6 at%
Ni/Fe/Co 80/5/15 wt%
Ni/Fe/Co 88/18/16 at%
Ni/Fe/Co/Nb/Ti/Al/C/Si 42.36/38/13/4.7/1.5/.03/.01/.4 wt%
Ni/Fe/Cr
Ni/Fe/Cr 27/7/66 at%
Ni/Fe/Cr 48.6/11.4/40 at%
Ni/Fe/Cr 51.2/11.4/37.4 wt%
Ni/Fe/Cr 52.2/12.4/35.4 wt%
Ni/Fe/Cr 52.8/11.8/35.4 wt%
Ni/Fe/Cr 53.8/12.8/33.4 wt%
Ni/Fe/Cr 59.1/13.2/27.7 wt%
Ni/Fe/Cr 65/15/20 at%
Ni/Fe/Cr 66.8/14.9/18.3 wt%
Ni/Fe/Cr 70.6/15.8/13.6 wt%
Ni/Fe/Cr 74.4/16.6/9 wt%
Ni/Fe/Cr 79.6/17.8/2.7 wt%
Ni/Fe/Cr 82.3/8.7/9 wt%
Ni/Fe/Cr with Curie Temp=480deg
Ni/Fe/Cu/Mo
Ni/Fe/Cu/Mo 75.3/13.0/5.3/6.4 wt%
Ni/Fe/Cu/Mo 77.8/13.5/5.5/3.2 wt%
Ni/Fe/Cu/Mo 77/14/5/4 at%
Ni/Fe/Cu/Mo 80/13/4/3 at%
Ni/Fe/Ga 10.2/55.1/34.7 wt%
Ni/Fe/Ga 20.3/45.2/34.5 wt%
Ni/Fe/Ga 30.4/35.3/34.3 wt%
Ni/Fe/Ga 40.3/25.5/34.2 wt%
Ni/Fe/Ga 50.1/15.9/34 wt%
Ni/Fe/Gd
Ni/Fe/Hf
Ni/Fe/Mo 78/17/4 wt%
Ni/Fe/Mo 79/16/5 wt%
Ni/Fe/Mo 80/15.7/4.3 wt%
Ni/Fe/Mo 80/15.7/4.3 wt%
Ni/Fe/Mo 80/15/5 at%
Ni/Fe/Mo 80/15/5 wt%
Ni/Fe/Mo 80/15/5 wt%
Ni/Fe/Mo/Mn 79/16.7/4/0.3 wt%
Ni/Fe/Mo/Mn 79/16.7/4/0.3 wt%
Ni/Fe/Os 51.8/11.6/36.6 wt%
Ni/Fe/Os 56.5/12.6/30.8 wt%
Ni/Fe/Os 61.8/13.8/24.4 wt%
Ni/Fe/Os 74.3/16.6/9.2 wt%
Ni/Fe/Pd 73.2/16.3/10.5
Ni/Fe/Pt/B 17.8/16.9/63.5/1.8 wt%
```

Ni/Fe/Pt/B 17.8/16.9/63.5/1.8 wt%

```
Ni/Fe/Pt/B 23.6/22.4/52/2 wt%
Ni/Fe/Pt/B 23.6/22.4/52/2 wt%
Ni/Fe/Tb 77.5/17.3/5.2 wt%
Ni/Fe/Tb 77.5/17.3/5.2 wt%
Ni/Fe/Tb 79.6/17.7/2.7 wt%
Ni/Fe/Tb 79.6/17.7/2.7 wt%
Ni/Fe/W 57.1/12.8/30.1 wt%
Ni/Fe/W 68/15.2/16.8 wt%
Ni/Ga 2/3 at%
Ni/Ga 50/50 at%
Ni/Ga 50/50 wt%
Ni/Ga 71.6/28.4 wt%
Ni/Ga 90/10 wt%
Ni/Ga 90/10 wt%
Ni/Ga 98/2 wt%
Ni/Gd 50/50 at%
Ni/Gd 50/50 at%
Ni/Gd 60/40 at%
Ni/Gd 60/40 at%
Ni/Gd 70/30 at%
Ni/Gd 70/30 at%
Ni/Gd 80/20 at%
Ni/Gd 80/20 at%
Ni/Gd 90/10 at%
Ni/Gd 90/10 at%
Ni/In 50/50 wt%
Ni/In 50/50 wt%
Ni/In/Mn 40.9/40.0/19.1 wt%
Ni/In/Mn 40.9/40/19.1 wt%
Ni/La 5/1 at%
Ni/La 90/10 wt%
Ni/La 90/10 wt%
Ni/Mg 50/50 wt%
Ni/Mg 50/50 wt%
Ni/Mg 55/45 wt%
Ni/Ma 80.5/19.5 wt%
Ni/Mg 80/20 at%
Ni/Mg 80/20 at%
Ni/Mg 80/20 wt%
Ni/Mg 89.2/10.8 wt%
Ni/Mg 92/08 wt%
Ni/Mg 92/08 wt%
Ni/Mg 92/8 at%
Ni/Mg 92/8 at%
Ni/Mg 93/7 wt%
Ni/Mg 95.6/4.4 wt%
Ni/Mg 95.6/4.4 wt%
Ni/Mn 25/75
Ni/Mn 25/75 wt%
Ni/Mn 47/53 at%
Ni/Mn 48/33/19 wt%
Ni/Mn 50/50 at%
Ni/Mn 50/50 at%
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Ni/Mn 50/50 wt%

Ni/Mn 51.7/48.3 wt%

Ni/Mn 51.7/48.7 wt%

Ni/Mn 51.7/48.7 wt%

Ni/Mn/Al 71.7/20.7/7.6 wt%

Ni/Mn/Al 71.7/20.7/7.6 wt%

Ni/Mn/Al/Si 94.5/2.5/2/1 at%

Ni/Mn/Al/Si 94.5/2.5/2/1 wt%

Ni/Mn/Al/Si 95/2/2/1 wt%

Ni/Mn/Al/Si 95/2/2/1 wt%

Nickel-manganese gallium sputtering targets

Ni/Mn/Ga 2:1:1 at%

Ni/Mn/Ga 2:1:1 at%

Ni/Mn/Ga 32/30/38 wt%

Ni/Mn/Ga 32/30/38 wt%

Ni/Mn/Ga 47.7/25.6/26.7 wt%

Ni/Mn/Ga 48.5/22.7/28.8 wt%

Ni/Mn/Ga 48/31/21 at%

Ni/Mn/Ga 48/32/20

Ni/Mn/Ga 49.1/27.6/23.3 wt%

Ni/Mn/Ga 49.1/27.6/23.3 wt%

Ni/Mn/Ga 49.9/30.3/19.8

Ni/Mn/Ga 49.9/30.3/19.8

Ni/Mn/Ga 49/29.2/21.8 at%

Ni/Mn/Ga 49/29.2/21.8 at%

Ni/Mn/Ga 49/29/22 at%

Ni/Mn/Ga 49/32/19 at%

Ni/Mn/Ga 5:3:2 at%

Ni/Mn/Ga 50/25/25 at%

Ni/Mn/Ga 50/30/20 at%

Ni/Mn/Ga 50/33/17 at%

Ni/Mn/Ga 52/24/24 at%

Ni/Mn/Ga 52/30/18 at%

Ni/Mn/Ga 53/27/20 at%

Ni/Mn/Ga 54/30/16 at%

Ni/Mn/Ga 55/20/25 at%

Ni/Mn/Ga 55/22.5/22.5 at%

Ni/Mn/Ga 55/30/15 at%

Ni/Mn/Ga 56/30/14 at%

Ni/Mn/Sb 24.9/23.4/51.7 wt%

Ni/Mn/Sb 24.9/23.4/51.7 wt%

Ni/Mo 50/50 wt%

Ni/Mo 85/15 wt%

Ni/Mo 89/11 at%

Ni/Mo 90/10

Ni/Mo 94/6 at%

Ni/Mo 95/5 at% 99.995%

Ni/Mo 97/3 at% 99.995%

Ni/Mo 99/1 at% 99.995%

Ni/Mo/Ag 60/25/15

Ni/Nb 97/3 at% 99.995%

Ni/Nb 99.5/0.5 at%99.995%

Ni/Nb 99/1 at% 99.995%

Ni/Nd 83.3/16.6 at%

Ni/P/Fe/Co/Cu

Ni/P/Fe/Co/Cu Nickel-palladium sputtering targets Ni/Pd 18/82 wt% Ni/Pd 18/82 wt% Ni/Pd 22.9/77.1 wt% Ni/Pd 4:6 at% Ni/Pd 4:6 at% Ni/Pd 45.3/54.7 wt% Ni/Pd 6:4 at% Ni/Pd 6:4 at% Ni/Pd 60/40 wt% Ni/Pd 60/40 wt% Ni/Pd 65/35 Ni/Pd 68.8/31.2 wt% Ni/Pd 8:2 at% Ni/Pd 8:2 at% Ni/Pd 90/10 at% Ni/Pd 90/10 wt% Ni/Pd 91.3/8.7 wt% Ni/Pd 91.3/8.7 wt% Ni/Pd 95/5 at% Ni/Pd 99.4/0.6 wt% Nickel-platinum sputtering targets Ni/Pt 50/50 at% Ni/Pt 65/35 at% Ni/Pt 75/25 wt% Ni/Pt 80/20 at% Ni/Pt 80/20 at% Ni/Pt 85.1/14.9 wt% Ni/Pt 85/15 at% Ni/Pt 87/13 at% Ni/Pt 90/10 at% Ni/Pt 95/5 at% Ni/Rh Ni/Ru 72/28 wt% Ni/Ru 95/5 wt% Ni/Sb 50/50 at% Ni/Sc 92.2/7.8 wt% Ni/Si Ni/Si 1:1 at% Ni/Si 2:1 at% Ni/Si 50/50 at% Ni/Si 80/20 wt% Ni/Si/B 82/1/17 at% Ni/Sn 25/75 wt% Ni/Ta 17.8/82.2 wt% Ni/Ta 24.5/75.5 wt% Ni/Ta 28.4/71.6 wt% Ni/Ta 32.7/67.3 wt% Ni/Ta 37.6/62.4 wt% Ni/Ta 37.6/62.4 wt% Ni/Ta 86/14 wt% Ni/Ta 93/7 wt%

Ni/Ta 95/5 wt%

Ni/Ta 98/2 wt% Nickel-titanium sputtering targets Ni/Ti /0.1 wt% Ni/Ti + 10 at% Rh Ni/Ti + 12 at% Rh Ni/Ti + 8 at% Rh Ni/Ti 1/2 at% Ni/Ti 1:1 at Ni/Ti 1:1 at% Ni/Ti 29/71 wt% Ni/Ti 3/1 at% Ni/Ti 3:2 at% Ni/Ti 40/60 wt% Ni/Ti 45/55 wt% Ni/Ti 47/53 at% Ni/Ti 48:52 at% Ni/Ti 49.5/50.5 at% Ni/Ti 5/0.05 wt% Ni/Ti 50.1/49.9 wt% Ni/Ti 50.5/49.5 at% Ni/Ti 50.8/49.2 at% Ni/Ti 50.8:49.2 at% Ni/Ti 50/50 at% Ni/Ti 50/50 wt% Ni/Ti 51/49 at% Ni/Ti 52.1/47.9 wt% Ni/Ti 52/48 at% Ni/Ti 54.1/45.9 wt% Ni/Ti 55.1/44.9 wt% Ni/Ti 55/45 wt% Ni/Ti 60/40 at% Ni/Ti 75/25 wt% Ni/Ti 78.6/21.4 wt% Ni/Ti 80/20 at% 99.995 Ni/Ti 80/20 wt% Ni/Ti 90/10 at% Ni/Ti 90/10 wt% Ni/Ti 95/5 at% Ni/Ti 95/5 wt% Ni/Ti 97/3 at% Ni/Ti 98.5/1.5 at% Ni/Ti 99.2/0.8 wt% Ni/Ti 99.5/0.5 at% Ni/Ti 99.9/0.1 wt% Ni/Ti 99.95/0.05 wt% Ni/Ti 99/1 at% Ni/Ti/Cu Ni/Ti/Cu 37/55/8 at% Ni/Ti/Cu 42/51/7 wt% Ni/Ti/Fe 44.3/45.2/10.5 wt% Ni/Ti/Fe 49.7/45/5.3 wt% Ni/Ti/Hf 45/40/15 at% Ni/Ti/Nb 94/5.5/0.5 wt% Ni/Ti/Pd 30/50/20 at%

Ni/Ti/Pt 90/5/5 at% Ni/Ti/Rh 49.9/32.6/17.5 wt% Ni/Ti/Rh 49/30.4/20.6 wt% Ni/Ti/Rh 50.9/34.9/14.2 wt% Ni/Ti/Sn 33.3/33.3/33.3 at% Ni/Ti/Zr 25/15/60 at% Nickel-vanadium sputtering targets Ni/V (with P) Ni/V 79/21 wt% Ni/V 86/14 wt% Ni/V 92/8 wt% Ni/V 93/7 wt% Ni/V 95/5 at% 99.995% Ni/V 97/3 at% 99.995% Ni/V 99.5/0.5 at% 99.995% Ni/V 99/1 at% 99.995% Ni/V/Zr 92/7/1 wt% Ni/W 1/0.12 at% Ni/W 1/0.16 at% Ni/W 1/0.19 at% Ni/W 1/0.32 at% Ni/W 90.7/9.3 at% Ni/W 90.7/9.3 at% Ni/W 95/5 at% 99.995% Ni/W 97/3 at% 99.995% Ni/W 99/1 at% 99.995% Ni/Zn 90/10 at% Ni/Zn 90/10 wt% Ni/Zn 95/5 at% Ni/Zn 99.9/0.1 wt% Ni/Zr 60/40 wt% Ni/Zr 60/40 wt% Ni/Zr 97/3 wt% Ni/Zr 97/3 wt% Ni/Zr 99/1 wt% Ni2/Mn/Ga Ni2Ga3 Ni2In3 Ni2MnGa Ni2MnGa (Fe54Pt46) Ni81/Fe19)85Hf15 **NiAs** NiB **NiO** NiP 90/10 wt% Nordic Royal 0 Os

Os/Ru 80/20 wt%

P

P205 Lead sputtering targets Pb Pb/Dy 98/2 at% Pb/In 95/5 wt% Pb/La 97/3 at% Pb/La 98/2 at% Pb/Se Pb/Se 1:1 at% Pb/Sn 50/50 mol% Pb/Sn 95/5 wt% Pb/Sn 97.5/2.5 wt% Pb/Te 1:1 at% Pb/Te 50/50 at% **PbS** Palladium sputtering targets, palladium e-beam pellets Pd Pd/Ag 7:3 at% Pd/Ag 77/23 wt% Pd/Ag/Ru/Au 75/20/2/3 wt% Pd/Au 3/1 at% Pd/Au 80/20 wt% Pd/Co/Au 70/20/10 at% Pd/Co/Mo 70/20/10 wt% Pd/Cr 87/13 wt% Pd/Cr 87/13 wt% Pd/Cr 92/8 at% Pd/Cr 93.2/6.8 wt% Pd/Cr 95.4/4.6 wt% Pd/Cr 97/3 wt% Palladium-copper sputtering targets Pd/Cu 1/1 at% Pd/Cu 1/2 at% Pd/Cu 1/3 at% Pd/Cu 2:3 Pd/Cu 25/75 at% Pd/Cu 3:2 Pd/Cu 35/65 wt% Pd/Cu 4:1 Pd/Cu 40/60 wt% Pd/Cu 50/50 at% Pd/Cu 53/47 wt% Pd/Cu 53:47 Pd/Cu 60/40 wt% Pd/Cu 60:40 at% Pd/Cu 70/30 wt% Pd/Cu 80/20 wt% Pd/Cu 90/10 wt% Pd/Cu/Mo 25/70/5 at% Pd/Cu/Ni 29/62/9 at% Pd/Cu/Re 25/70/5 at% Pd/Cu/Si 91/4/5 wt% Pd/Cu/W 25/70/5 at% Pd/Cu/Y 57/38/5 wt%

Pd/Dv/Au 88/7/5 wt% Pd/Eu/Cu 60/1/39 Pd/Eu/Cu 60/2/38 wt% Pd/Eu/Cu 62/1/37 Pd/Fe (Fe 1000ppm) Pd/Fe (Fe 100ppm) Pd/Fe (Fe 200ppm) Pd/Fe (Fe 500ppm) Pd/Ga 1:1 at% Pd/Gd 70/30 at% Pd/Gd 90/10 at% Pd/Gd 99.9/0.1 at% Pd/Gd 99/1 at% Pd/Gd/Ag 86/9/5 wt% Pd/Gd/Cu 60/1/39 Pd/Gd/Pb 88.5/7/4.5 wt% Pd/Gd/Y/Pb 86.5/5.5/3/5 wt% Pd/In 28.4/71.6 wt% Pd/Mn 99.32/0.68 at% Pd/Mn 99.8/0.2 wt% Pd/Mo 32/68 at% Pd/Mo 53/47 at% Pd/Mo 72/28 at% Pd/Mo 9/1 at% Palladium-Nickel sputtering targets Pd/Ni 3/1 at% Pd/Ni 55/45 wt% Pd/Ni 60/40 at% Pd/Ni 70/30 wt% Pd/Ni 75/25 at% Pd/Ni 80/20 wt% Pd/Ni 90/10 wt% Pd/Ni 95/5 wt% Pd/Ni 99/1 wt% Pd/Pb 90/10 at% Palladium-platinum sputtering targets Pd/Pt 3/1 at% Pd/Pt 80/20 wt% Pd/Pt 90/10 wt% Pd/Pt/Mn 28.5/18/53.5 wt% Pd/Pt/Mn 28.5/18/53.5 wt% Pd/Re 1/1 at% Pd/Re 1/2 at% Pd/Re 1/3 at% Pd/Re 2/98 at% Pd/Re 3/1 at% Pd/Re 95/5 at% Pd/Rh 90/10 wt% Pd/Rh 94/6 at % Pd/Ru 95/5 wt% Pd/Si 1:1 at% Pd/Si 50/50 at% Pd/Ta 1/1 at% Pd/Ta 1/3 at%

Pd/Ta 2/1 at% Pd/Ta 25/75 wt% Pd/Ta 3/1 at% Pd/Ta 8/92 at% Pd/Ta 95/5 at% Pd/Ta 98/2 at% Pd/Ti 95/5 at% Pd/W 1/3 at% Pd/W 1/99 at% Pd/W 3/1 at% Pd/W 4/1 at% Pd/W 8/92 at% Pd/Y 90/10 wt% Pd/Y/Ag 60/5/35 wt% Pd/Y/Ag 85/5/10 at% Pd/Y/Ag/Nb 76/2/20/2 wt% Pd/Y/Ag/Nb/Mo 57/3.5/36/3/0.5 wt% Pd/Y/Ag/Nb/Ru 75/2/19/2/2 wt% Pd/Y/Ag/Ta 73/3/20/4 wt% Pd/Y/Pb 91/4/5 wt% Pd3Y Pd77Ag23 **PLZT** Pr Pr/Fe/B/Nb 7.7/84.6/3.8/3.9 Pr/Fe/Co/B 26.7/72.3/1 wt% Platinum sputtering targets Pt Pt/AI 83/17 wt% Pt/B 80/20 at% Pt/Co 75/25 at% Pt/Co/Mn 68.838/28.046/3.116 at% Pt/Co/Mn 75:22.5:2.5 at% Pt/Cr 3/1at% Pt/Fe 3:1 at % Pt/Fe 50/50 at% Pt/Fe 75/25 at% Platinum-iridium sputtering targets Pt/Ir 70/30 wt% Pt/Ir 80/20 wt% Pt/Ir 90/10 at% Pt/Ir 90/10 at% Pt/Ir 90/10 wt% Pt/Ir 95/5 wt% Platinum-manganese sputtering targets Pt/Mn 1:1 at% Pt/Mn 35/65 at% Pt/Mn 40/60 at% Pt/Mn 43/57 at% Pt/Mn 50/50 at% Pt/Mn 68.5/31.5 wt% Pt/Mn 71.2/28.8 wt% Pt/Mn 72/28 wt% Pt/Mn 78/22 wt%

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Pt/Ni 3/1at%
Pt/Pd 50/50 at%
Pt/Pd 60/40 wt%
Pt/Pd 80/20 wt%
Pt/Rh 87/13 wt%
Pt/Rh 90/10 wt%
Pt/Ru 1:1 at%
Pt/Ru 50/50 wt%
Pt/Ru 56.2/43.8 wt%
Pt/Ru 65.8/34.2 wt%
Pt/Ru 66/34 wt%
Pt/Ru 74.2/25.8 wt%
Pt/Si 1:1 at%
Pt/Si 80/20 at%
Pt3Y
PTFE
Pyrex
PZT
Top
R
Rb
Rhenium sputtering targets, rhenium e-beam pellets
Re
Re/Os
Rhodium sputtering targets, rhodium e-beam pellets
Rh/Si 10/90 wt%
Ruthenium sputtering targets, ruthenium e-beam pellets
Ru
Ru/Al 93.8/6.2 wt%
Ru/Mo 1:1 at%
Ru/Mo 2/1 at%
Ru/Ta 12.3/87.7 wt%
Ru/Ta 19.4/80.6 wt%
Ru/Ta 27.2/72.8 wt%
Ru/Ta 35.9/64.1 wt%
Ru/Ta 80/20 at%
Ru/W 1:1 at%
S
sac 405
Antimony sputtering targets, antimony-beam pellets
Sb/Bi/Te 0.85:0.15:3.6 at%
Sb/Cu 79.3/20.7 wt%
Sb/Sn 96/4 wt%
Sb/Sn/In 70.9/14.8/14.3 wt%
Antimony-tellurium sputtering targets
Sb/Te 1/2
Sb/Te 2/1
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Sb/Te 2/3 at%
Sb/Te 70/30 at%
Sb/Te/Ag/In 60/30/5/5 at%
Sb/Te/In/Ag
Sb2Te3
Sb2Te3.5
SbC 70/30 at%
SbPb 99.9/0.1
Scandium sputtering targets, scandium e-beam pellets
Sc
Sc/Au 1/1 at%
Sc/Co 1/1 at%
Sc/Cu 1/1 at%
Sc/Ni 50/50 at%
Sc/Ti 23.8/76.2 wt%
Sc/Ti 48.4/51.6 wt%
Sc/Ti 73.8/26.2 wt%
Sc/Zr 33/67 wt%
Selenium sputtering targets
Silicon sputtering targets
Si
Si N type
Si P type
Si undoped
Si (B doped)
Si (boron doped)
Si (undoped)
Silicon-aluminum sputtering targets
Si/Al 50/50 at%
Si/Al 60/40 at%
Si/Al 61/39 wt%
Si/Al 70/30 wt%
Si/Al 80/20 at%
Si/Al 92/8 wt%
Si/Al 99.5/0.5 at%
Si/Al/Ti 88/8/4 wt%
Si/Au 19/81 at%
Si/Au 90/10 wt%
Si/C 75/25 at%
Si/C 90/10 at%
Si/Cr 60/40 wt%
Si/Er/O 38/0.1/61.9
Si/Fe 90/10 at%
Si/Fe/Co 50/40/10 at%
Silicon-germanium sputtering targets
Si/Ge
Si/Ge 1/1 at%
Si/Ge 1/2 at%
Si/Ge 2/1 at%
Si/Ge 30/70 at%
Si/Ge 50/50 wt%
Si/Ge 60.8/39.2 wt%
Si/Ge 70/30 at%
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Si/Ge 78/22 at%
Si/Ge 80/20 at%
Si/Ge doped w/P
Si/Ge/P 60.45/39/0.55 wt%
Si/Ge/P 60.92/39/0.08 wt%
Si/Ge/Sb 10/13.5/76.5 at%
Si/Ge/Sb 5/14/81 at%
Si/SiC 50/50 at%
Si/SiC 75/25 at%
Si/Ti 95/5 at%
Si/V
Si/V 40/60 at%
Si/W 3:2 at%
Si/W 60/40 at%
Si/Zr 50/50 at%
Si/Zr 50/50 at%
Si/Zr 66.7/33.3 at%
Si/Zr 80/20 at%
Si/Zr 90/10 at%
Si/Zr 95/5 at%
Si2O3
Si2Sb2Te5
Si3N4
Si60/Al40 at%
SiC
SiGe B-doped
SiGe P-doped
Silicon Nitride
SiO
Silicon dioxide sputtering targets, quartz sputtering targets
SiO2 99.995%
SiP
Sm
Sm/Ce 90/10 at%
Sm/Co 1/5 at%
Sm/Co 17/83 at%
Sm/Co 41.9/58.1 wt%
Sm/Co/Cu 17/34/49 wt%
Sm/Fe 38/62 at%
Sm/Fe/B 43.4/51/5.6 at%
Sm/Zr 50/50 wt%
Sm2Co7 22.2/77.8 at%
SmC<sub>0</sub>5
SmFe2
Tin sputtering targets
Sn
Sn.7In.3
Sn/Ag 96.5/3.5 wt%
Sn/Aq/Cu 95.4/3.1/1.5 wt%
Sn/Ag/Cu 95.5/3.8/0.7 wt%
Sn/Ag/Cu 96.3/3/0.7 wt%
Sn/Ag/Cu 96.5/3/0.5 wt%
Sn/Ag/Cu/Lu 94.3/2.5/0.7/2.5 wt%
Sn/Ag/La 96.25/3.5/0.25 wt%
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Sn/Ag/La 96.4/3.5/0.1 wt% Sn/Ag/La 96.45/3.5/0.05 wt% Sn/Ag/Lu 94.1/3.4/2.5 wt% Sn/Au 72/25 at% Sn/Au 90/10 wt% Sn/Bi 50/50 at% Sn/Cu 60/40 wt% Sn/Cu/Ag/Ce Sn/Cu/Aq/La Sn/Cu/Ag/Mn Sn/Cu/Ag/Ni Sn/Cu/Ag/Ti Sn/Cu/Aq/Y Sn/In 48.3/51.7 wt% Sn/In 9/0.01 wt% Sn/In 96/4 at% Sn/In 99.99/0.01 wt% Sn/Li 95/5 at% Sn/Pb 63/37 wt% Sn/Pb 90/10 wt% Sn/Pb 97.5/2.5 wt% Sn/Pt 96/4 wt% Sn/Pt 98.4/1.6 wt% Sn/Sb 95/5 at% Sn/Sb 95/5 wt% Sn/Sb 96/4 wt% Sn/Sb 98/2 at% Sn/Sb 99.5/0.5 wt% Sn/Te Sn/Zn/Sb 65/34/1 wt% Tin oxide sputtering targets SnO₂ SnS Sodium Sr 98% Sr/Cu 58/42 wt% Sr/Hf 32.9/67.1 wt% Sr/Y 66.6:33.3 at% Sr/Zr/Y 50/42/8 at% Sr2FeMoO6 **SrO** SrSc2Te4 SrTiO3 SrTiO3 w/0.1m% Cr203 SrTiO3/Cr2O3 SrZrO3 SrZrO3/Cr2O3 Т

Tantalum sputtering targets

Ta 99.995%

Ta/Al

```
Ta/Al 3/1 at%
Ta/AI 50/50 wt%
Ta/AI 80/20 at%
Ta/Al 87/13 wt%
Ta/Al 90/10 at%
Ta/Al 95:5 at%
Ta/Cr 99/1 wt%
Ta/Hf 50/50 at%
Ta/Hf 70/30 at%
Ta/Hf 80/20 at%
Ta/Hf 90/10 at%
Ta/Mo 1:1 at%
Ta/Nb 50/50 at%
Ta/Pd 80/20 at%
Ta/Pt 80/20 at%
Ta/Ru 50/50 at%
Ta/Ru 80/20 at%
Ta/Si 70/30 at%
Ta/Si 91.5/8.5
Ta/Ti 92/8 at%
Ta/V 50/50 at%
Ta/W 1:1 at%
Ta/W 1:4 at%
Ta/W 77:23 at%
Ta/Zr 50/50 at%
Ta/Zr 75/25 at%
Ta/Zr/Nb 10/68/22
Ta:C (<10% C)
Tantalum oxide sputtering targets
Ta205
Ta5Si3
TaN
TaSi2
Terbium sputtering targets
Tb
Tb/Co/Fe
Tb/Dy/Fe 0.3/0.7/1.9
Tb/Dy/Fe 22.4/53.5/24.1 wt%
Tb/Fe 10.5/89.5 at%
Tb/Fe 42/58 at%
Tb/Fe 48/52 at%
Tb/Fe 55/45 at%
Tb/Fe/B 43.4/51/5.6 at%
Tb/Sm/Yb/Nd
Tb23(Co50Fe50)77
Tb407
TbAl2
TbFe2
Tellurium sputtering targets
Te
Te/Se 70/30 wt%
Te/Se 78.4/21.6 at%
Te/Se 90/10 wt%
Titanium sputtering targets, titanium e-beam pellets
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Τi
Ti 99.995%
Ti/Ag 98/2 at%
Ti/Ag 98/2 wt%
Titanium-aluminum sputtering targets
Ti/AI
Ti/AI 50:50 at%
Ti/Al 1/1 at%
Ti/Al 1:3 at%
Ti/AI 15/85 at%
Ti/Al 16.5/83.5 wt%
Ti/Al 22.4/77.6 wt%
Ti/Al 25/75 at%
Ti/Al 3/1 at%
Ti/AI 30.7/69.3 wt%
Ti/Al 37.2/62.8 wt%
Ti/AI 50/50 at%
Ti/Al 50/50 wt%
Ti/Al 60/40 at%
Ti/Al 64/36 wt%
Ti/Al 66.6/33.3 wt%
Ti/Al 70:30 at%
Ti/Al 72.7/27.3 wt%
Ti/AI 75/25 at%
Ti/Al 75/25 wt%
Ti/AI 80/20 at%
Ti/Al 84.2/15.8 wt%
Ti/Al 87.7/12.3 wt%
Ti/Al 90/10 at%
Ti/Al 94.1/5.9 wt%
Ti/Al 95/5 at%
Ti/Al 99/1 at%
Ti/Al/B 44/44/12 at%
Ti/Al/Cr 47/36.5/16.5 wt%
Ti/Al/Nb 33/33/33 at%
Ti/Al/Si 40/40/20 at%
Ti/Al/Si 40/50/10 at%
Ti/Al/V 33/33/33 at%
Ti/AI/V 40/40/20 at%
Ti/AI/V 6/4/1 at%
Ti/Al/V 80/5/15 wt%
Ti/Al/V 85/5/10 wt%
Ti/AI/V 90/6/4 wt%
Ti/AI/V 94.5/3/2.5 wt%
Ti/Al/Y 48/48/4 at%
Ti/Au 99/1 wt%
Titanium-cobalt sputtering targets
Ti/Co 44.8/55.2 wt%
Ti/Co 54.9/45.1 wt%
Ti/Co 65.5/34.5 wt%
Ti/Co 70.9/29.1 wt%
Ti/Co 76.5/23.5 wt%
Ti/Co 78.7/21.3 wt%
Ti/Co 81/19 wt%
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Ti/Co 83.3/16.7 wt%
Ti/Co 85.6/14.4 wt%
Ti/Co 88/12 wt%
Ti/Co 90.3/9.7 wt%
Ti/Co 91.5/8.5 wt%
Ti/Co 92.7/7.8 wt%
Ti/Co 95.1/4.9 wt%
Ti/Co 97.5/2.5 wt%
Titanium-chromium sputtering targets
Ti/Cr (1:1)
Ti/Cr 1/1 at%
Ti/Cr 18.7/81.3 wt%
Ti/Cr 21.3/78.7 wt%
Ti/Cr 38/62 wt%
Ti/Cr 44.8/55.2 wt%
Ti/Cr 48/52 wt%
Ti/Cr 50/50 wt%
Ti/Cr 55/45 at%
Ti/Cr 58/42 wt%
Ti/Cr 70.9/29.1 wt%
Ti/Cr 78.7/21.3 wt%
Ti/Cr 85/15 at%
Ti/Cr 89.2/10.8 wt%
Ti/Cr 9.3/90.7 wt%
Ti/Cr 99/1 at%
Ti/Cu 50/50 at%
Ti/Cu 98/2 wt%
Ti/Cu/Ni/Sn 40.9/24.9/20/14.2 wt%
Ti/Fe 46/54 wt%
Ti/Hf 95/5 at%
Ti/Hf 98/2 at%
Ti/Hf/V 84/4/12 at%
Ti/Mg 99/1 at%
Titanium-niobium sputtering targets
Ti/Nb 55/45 wt%
Ti/Nb 75/25 at%
Ti/Nb 80/20 at%
Ti/Nb 94/6 at%
Ti/Nb 95/5 wt%
Ti/Nb 98/2 wt%
Ti/Nb 99/1 wt%
Ti/Nb 99:1 at%
Titanium-nickel sputtering targets
Ti/Ni 1/1 at%
Ti/Ni 10/90 wt%
Ti/Ni 44.5/55.5 wt%
Ti/Ni 44.9/55.1t%
Ti/Ni 44.93/55.07 wt%
Ti/Ni 44/56 wt%
Ti/Ni 46.9/53.1 wt%
Ti/Ni 48.9/51.1 wt%
Ti/Ni 50.5/49.5 at%
Ti/Ni 50/50 at%
Ti/Ni 50/50 wt%
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Ti/Ni 51/49 at%
Ti/Ni 52/48 at%
Ti/Ni 52/48 wt%
Ti/Ni 53.8/46.2 wt%
Ti/Ni 53/47 at%
Ti/Ni 53/47 wt%
Ti/Ni 54.1/45.9 wt%
Ti/Ni 58/42 wt%
Ti/Ni 90/10 at%
Ti/Ni 90/10 wt%
Ti/Ni 95/5 at%
Ti/Ni/Cu 46.6/45.1/8.3 wt%
Ti/Ni/Cu 47/47/6 at%
Ti/Ni/Cu 49.3/32.9/17.8 wt%
Ti/Ni/Pd
Ti/Ni/Pd 45.2/37.7/17.1 wt%
Ti/Pd 50/50 at%
Ti/Pd/Ni 35.4/47.2/17.4 wt%
Ti/Pd/Ni 38.5/47.5/14 wt%
Ti/Pd/Ni 5:4:1 at%
Ti/Ru 20/80 at%
Ti/Ru 50/50 at%
Ti/Ru 70/30 at%
Ti/Ru 80/20 at%
Ti/Ru 85/15 at%
Ti/Si 1/2 at%
Titanium-silicon sputtering targets
Ti/Si 15.9/84.1 wt%
Ti/Si 29.9/70.1 wt%
Ti/Si 42.2/57.8 wt%
Ti/Si 46/54 wt%
Ti/Si 53.2/46.8 wt%
Ti/Si 63/37 wt%
Ti/Si 71.9/28.1 wt%
Ti/Si 74/26 wt%
Ti/Si 79.9/20.1 wt%
Ti/Si 83.7/16.3 wt%
Ti/Si 87.2/12.8 wt%
Ti/Si 90.6/9.4 wt%
Ti/Si 93.9/6.1 wt%
Ti/Si 96/4 wt%
Ti/Sn 50/50 at%
Ti/Sn 54.8/45.2 wt%
Ti/Sn/Zr 60/20/20 wt%
Titanium-vanadium sputtering targets
Ti/V 1:1 at%
Ti/V 19/81 wt%
Ti/V 38.5/61.5 wt%
Ti/V 58.5/41.5 wt%
Ti/V 70/30 wt%
Ti/V 72/28 at%
Ti/V 75/25 at%
Ti/V 79/21 wt%
Ti/V 85/15 at%
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Ti/V 90/10 at% Ti/V 95/5 at% Ti/V/AI 40/40/20 at% Ti/V/Cr 21/25/54 wt% Ti/W 90/10 wt% Ti/W 94/6 wt% Ti/W 95/5 wt% Ti/W 97/3 wt% Titanium-zirconium sputtering targets Ti/Zr 21/79 at% Ti/Zr 50/50 at% Ti/Zr 50/50 wt% Ti/Zr 55.1/44.9 wt% Ti/Zr 70/30 at% Ti/Zr 75/25 wt% Ti/Zr 77.5/22.5 at% Ti/Zr 92/8 wt% Ti/Zr/B 60/30/10 at% Ti/Zr/Cu/Ni 40/20/20/20 wt% Ti/Zr/Mn 70/30 (+1 at%) Ti/Zr/Nb 47.5/5/47.5 wt% Ti/Zr/Nb/Mn 67.5/29.0/3/0.5 at% Ti/Zr/Ta 42.5/15/42.5 wt% Ti/Zr/Ta/Mn 67.5/29.0/3/0.5 at% Ti/Zr/V 25.2/48/26.8 wt% Ti/Zr/V 30/20/50 at% Ti/Zr/V 54.6/44.5/0.8 wt% Ti/Zr/V 54.9/44.8/0.3 wt% Ti0.7AI0.3N **Ti2O3** TiAl3 TiB2 TiC TiN Tin zinc oxide (tin 10%) TiNiCu 54.5/30.5/15 at% TiNiCu 54/31/15 at% TiNiPd 54/23.5/22.5 at% TiO Titanium dioxide sputtering targets TiO2 TiO2 doped 2% Ce TiSi2 Titanium Diboride Titanium-tungsten sputtering targets, ti-tungsten sputtering targets TiW 90/10 wt% Tm ٧ Vanadium sputtering targets, Vanadium e-beam pellets

V 99.8%

Vanadium-aluminum sputtering targets

V/AI 80/20 at%
V/AI 85/15 at%
V/AI 90/10 at%
V/AI 99.5/0.5 wt%
V/AI 99.7/0.3 wt%
V/Au 96.2/3.8 wt%
V/Au 98.1/1.9 wt%
V/Co 40/60
V/Co 80/20 at%
V/Co 85/15 at%
V/Co 90/10 at%
V/Cr 80/20 at%
V/Cr 85/15 at%
V/Cr 90/10 at%
V/Cr 90/10 wt%
V/Cu 85/15 at%
V/Cu 90/10 at%
V/Fe (1:1)
V/Fe 80/20 at%
V/Fe 85/15 at%
V/Fe 90/10 at%
V/Mn (1:1)
V/Mn 32/68 wt%
V/Mo 1/1 at%
V/Mo 50:50 at%
V/Mo 60:40 at%
V/Mo 70:30 at%
V/Mo 80/20 at%
V/Mo 85/15 at%
V/Mo 90/10 at%
V/Mo 95:5 at%
V/Nb 45/55 wt%
V/Nb 60/40 wt%
V/Nb 80/20 at%
V/Nb 85/15 at%
V/Nb 90/10 at%
V/Nb 95/5
V/Ni 80/20 at%
V/Ni 85/15 at%
V/Ni 90/10 at%
V/Ru 50:50 at%
V/Ru 60:40 at%
V/Ru 70:30 at%
V/Ru 80:20 at%
V/Ru 85:15 at%
V/Ru 90:10 at%
V/Ru 95:5 at%
V/Si 75/25 at%
V/Ta (4:1)
V/Ti 60/40 at%
V/Ti 65/35 wt%
V/Ti 80/20 at%
V/Ti 85/15 at%
V/Ti 90/10 at%

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V/Ti 95/5 wt%
V/Ti/AI 85/10/5 at%
V/Ti/Al 90/5/5 at%
V/Ti/Cr 85/10/5 at%
V/Ti/Cr 90/5/5 at%
V/Ti/Cr 90/5/5 at%
V/Ti/Mo 85/10/5 at%
V/Ti/W 83.8/10.9/5.2 wt%
V/Ti/Zr 26.8/25.2/48 wt%
V/Ti/Zr/Hf 25/25/25/25 at%
V/W 50:50 at%
V/W 60:40 at%
V/W 70:30 at%
V/W 80:20 at%
V/W 85:15 at%
V/W 90:10 at%
V/W 94.8/5.2 wt%
V/W 95:5 at%
V/W 96.5/3.5 wt%
V/W 98.2/1.8 wt%
V/W 98.5/1.5 at%
V/W 98/2 wt%
V/W 99/1 at%
V2O3
V205
V3Si at%
VC
VO<sub>2</sub>
W
                                Tungsten sputtering targets
W
W/Re 90/10 wt%
Tungsten-titanium sputtering targets
W/Ti 10/90 wt%
W/Ti 50/50 wt%
W/Ti 50/50 wt%
W/Ti 80/20 wt%
W/Ti 90/10 wt%
W/V 93/7 wt%
W2C 99.5%
WC
WO3
WS2
                                 Yttrium sputtering targets
Y/Ti 65/35 wt%
Y/Zr 49.4/50.6 wt%
Y/Zr 85.5/14.5 wt%
YAI2
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Ytterbium sputtering targets Yb Yb 99% Yb5Sb3 **YBaCuO YBCO YBiFeO YSZ** Z Zinc sputtering targets Zn Zinc-aluminum sputtering targets Zn/Al 10/90 at% Zn/Al 44.7/55.3 wt% Zn/AI 60/40 wt% Zn/Al 70.8/29.2 wt% Zn/Al 72/28 at% Zn/Al 87.9/12.1 wt% Zn/Al 87/13 at% Zn/Al 90.6/9.4 wt% Zn/Al 93.2/6.8 wt% Zn/Al 93/7 at% Zn/Al 94/6 at% Zn/Al 95.6/4.4 wt% Zn/Al 95/5 at% Zn/Al 95/5 wt% Zn/Al 96.5/3.5 at% Zn/Al 96/4 at% Zn/Al 96/4 wt% Zn/Al 97.5/2.5 at% Zn/Al 97.9/2.1 wt% Zn/Al 97:3 at% Zn/Al 98.1/1.9 wt% Zn/Al 98.5/1.5 wt% Zn/Al 98.7/1.3 wt% Zn/Al 98/2 at% Zn/Al 98/2 wt% Zn/Al 99.2/0.8 wt% Zn/Al 99.3/0.7 wt% Zn/Al 99.5/0.5 wt% Zn/Al 99/1 at% Zn/Al 99/1 wt% Zn/Al/Sc 98/1.6/0.4 wt% Zn/Al2O3 95/5 wt% Zn/Al2O3 99/1 wt% Zn/AIN 95/5 wt% Zn/AIN 99/1 wt% Zn/Bi 50/50 at% Zn/Ca 95/5 wt% Zn/Ca 99/1 wt% Zn/CaO 95/5 wt% Zn/CaO 99/1 wt%

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Zn/Cr 95/5 wt%
Zn/Cr 99/1 wt%
Zinc-copper sputtering targets
Zn/Cu 10.3/89.7 wt%
Zn/Cu 20.5/79.5 wt%
Zn/Cu 30.6/69.4 wt%
Zn/Cu 40.7/59.3 wt%
Zn/Cu 50.7/49.3 wt%
Zn/Cu 60.7/39.3 wt%
Zn/Cu 61.5/38.5 at%
Zn/Cu 70.6/29.4 wt%
Zn/Cu 80.5/19.5 wt%
Zn/Cu 80-85% Zn
Zn/Cu 90.3/9.7 wt%
Zn/Cu 94/6 at%
Zn/Cu 95/5 wt%
Zn/Cu 98/2 wt%
Zn/Cu 99.5/0.5 at%
Zn/Cu 99.5/0.5 at%
Zn/Cu 99/1 wt%
Zn/Cu/Aq 60.3/37.7/2 at%
Zn/Cu/Ga 1.1/1.1/0.9
Zn/Cu/Mn 93.5/0.5/6 at%
Zinc-gallium sputtering targets
Zn/Ga /0.1 wt%
Zn/Ga 5/0.05 wt%
Zn/Ga 89.4/10.6 wt%
Zn/Ga 91.5/8.5 wt%
Zn/Ga 92.5/7.5 wt%
Zn/Ga 93.6/6.4 wt%
Zn/Ga 95.7/4.3 wt%
Zn/Ga 95/5 wt%
Zn/Ga 97.9/2.1 wt%
Zn/Ga 98/2 wt%
Zn/Ga 99.5/0.5 at%
Zn/Ga 99.5/0.5 wt%
Zn/Ga 99/1 wt%
Zn/Ga/Mn 93.5/0.5/6 at%
Zn/In 98/2 wt%
Zn/In 99.2/0.8 wt%
Zn/ln 99.5/0.5 wt%
Zn/In/Al 88.4/10.3/1.3 wt%
Zinc-magnesium sputtering targets, zinc-magnesium e-beam pellets
Zn/Mg 12.4/87.6 wt%
Zn/Mg 23/77 wt%
Zn/Mg 32.2/67.8 wt%
Zn/Mg 4:1 at%
Zn/Mg 40.2/59.8 wt%
Zn/Mg 47.3/52.7 wt%
Zn/Mg 53.6/46.4 wt%
Zn/Mg 59.2/40.8 wt%
Zn/Mg 64.2/35.8 wt%
Zn/Mg 72.9/27.1 wt%
Zn/Mg 80.1/19.9 wt%
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Zn/Mg 85/15 at% Zn/Mg 86.3/13.7 wt% Zn/Mg 89/11 wt% Zn/Mg 9:1 at% Zn/Mg 91.5/8.5 wt% Zn/Mg 93.8/6.2 wt% Zn/Mg 93.8/6.2 wt% Zn/Mg 95/5 at% Zn/Ma 95/5 wt% Zn/Mg 96/4 wt% Zn/Mg 98.1/1.9 wt% Zn/Mg 99/1 wt% Zn/Mg/Al 93/6.1/0.9 wt% Zn/Mg/In 82.2/8.2/9.6 wt% Zn/Mg/In 82.2/8.2/9.6 wt% Zn/Mn 94/6 at% Zn/Mn 99.3/0.7 wt% Zn/Mn 99.5/0.5 wt% Zn/Mn 99.6/0.4 wt% Zn/Mn/Te 44/6/50 at% Zn/Na 95/5 wt% Zn/Na 97/3 at% Zn/Na 99/1 at% Zn/Na 99/1 wt% Zn/Ni 85/15 wt% Zn/Ni 90/10 wt% Zn/Ni 99/1 wt% Zn/Si 95/5 wt% Zn/Si3N4 95/5 wt% Zn/Si3N4 99/1 wt% Zinc-tin sputtering targets Zn/Sn 12.1/87.9 wt% Zn/Sn 19.1/80.9 wt% Zn/Sn 2:1 Zn/Sn 26.9/73.1 wt% Zn/Sn 35.5/64.4 wt% Zn/Sn 45.2/54.8 wt% Zn/Sn 47/53 at% Zn/Sn 5.8/94.2 wt% Zn/Sn 50/50 at% Zn/Sn 56.2/43.8 wt% Zn/Sn 66/34 at% Zn/Sn 68.8/31.2 wt% Zn/Sn 70/30 at% Zn/Sn 80/20 at% Zn/Sn 83.2/16.8 wt% Zn/Sn 90/10 at% Zn/Sn/Cu/Ti/Nb 1/1/1/1/1 at% Zn/Te 1:1 at% Zn/Te/Cu Zn/Ti 95/5 wt% Zn/Ti 99/1 wt% Zn3Sb2 ZnFe2

ZnMqO ZnMn 99.4/0.6 wt% ZnN Zinc oxide sputtering targets ZnO ZnO/Al 98:2 at% ZnO/Al2O3 98/2 wt% ZnO/Ga 99/1 ZnO/ln2O3/SnO2 2.5/1.7/0.3 ZnO/SiO2 78 wt% ZnO/SnO2 2/1 wt% ZnO/SnO2 52/48 wt% Zno/SnO2 90/10 wt% ZnO-Al2O3 98/2 wt% ZnS Zirconium sputtering targets Zr 99.8% Zirconium-aluminum sputtering targets Zr/Al 84/16 wt% Zr/Al 91/9 wt% Zr/Au 98/2 wt% Zr/Au 99/1 wt% Zr/Ce 97/3 wt% Zr/Ce 97/3 wt% Zr/Co/Al 76.5/20.9/2.6 wt% Zr/Cr 46/54 wt% Zr/Cr 86/14 wt% Zr/Cr2 Zr/Cu 50/50 at% Zr/Cu 60/40 wt% Zr/Cu 93/7 wt% Zr/Cu/Ag/Al 43:43:7:7 at% Zr/Cu/Al 75/25/5 wt% Zr/Cu/Al/Ag 43/43/7/7 at% Zr/Cu/Al/Ni 60.1/27.6/4.9/7.4 wt% Zr/Cu/Ni 59.2/31.4/4.9/4.5 Zr/Cu/Ti 65/25/10 wt% Zr/Fe 66/33 at% Zr/Ga 90/10 wt% Zr/Gd 97/3 wt% Zr/Ni 30/70 Zr/Ni/Cu/Al 74/12/12/2 wt% Zr/Sc 84/16 at% Zirconium-silicon sputtering targets Zr/Si 1:2 at% Zr/Si 33.3/66.6 at% Zr/Si 33/67 at% Zr/Si 50/50 at% Zr/Si 55.5/44.5 at% Zr/Si 66.7/33.3 at% Zr/Si 80/20 at% Zr/Si 85:15 at% Zr/Si 88.3/11.7 wt% Zr/Si 90/10 at%

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Zr/Si 92.9/7.1 wt%
Zr/Si 94.8/5.2 wt%
Zr/Si 95/5 at%
Zr/Si 95:5 at%
Zr/Si 96.7/3.3 wt%
Zr/Sn/Fe/Cr/Ni 98.198/1.43/0.21/0.11/0.0052 wt%
Zr/Ta 20/80 wt%
Zr/Ti 65.6/34.4 wt%
Zr/Ti 68.2/31.8 wt%
Zr/Ti 92/8 wt%
Zr/Ti/V 40/30/30 at%
Zr/V/Fe 70/24.6/5.4 wt%
Zirconium-yttrium sputtering targets
Zr/Y 55.6/44.4 wt%
Zr/Y 55/45 at%
Zr/Y 55/45 wt%
Zr/Y 70.5/29.5 wt %
Zr/Y 70/30 wt%
Zr/Y 74/26 wt%
Zr/Y 79/21 wt%
Zr/Y 80.4/19.6 wt%
Zr/Y 80/20 wt%
Zr/Y 81.4/19.6 wt%
Zr/Y 81.9/18.1
Zr/Y 82.2/17.8 wt%
Zr/Y 82/18 at%
Zr/Y 82/18 wt%
Zr/Y 84.3/15.7 wt%
Zr/Y 84/16 at%
Zr/Y 84/16 wt%
Zr/Y 85.2/14.8 at%
Zr/Y 85.3/14.7 wt%
Zr/Y 85.5/14.5 wt%
Zr/Y 85/15 at%
Zr/Y 85/15 wt%
Zr/Y 87/13 wt%
Zr/Y 88/12 at%
Zr/Y 88/12 wt%
Zr/Y 90.2/9.8 wt%
Zr/Y 90/10 wt%
Zr/Y 91/9 at%
Zr/Y 91/9 wt%
Zr/Y 92/8 wt%
Zr/Y 93/7 wt%
Zr/Y 94.3/5.7 wt%
Zr/Y 94/6 at%
Zr/Y 95/5 wt%
Zr/Y 97/3 at%
Zr/Y 99/1 at%
Zr/Y/Ce 75/20/5 wt%
Zr2Cu
ZrN
ZrO
Zirconium oxide sputtering targets, zirconia sputtering targets
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ZrO2 ZrSc ZrScLi 33/33/33 ZrSi2 Zr/Y 80/20 wt%