

SOPRA List of Files

Filename	Symbol	Range (nm)	Description
Individual Files			
7059	7059	250 900	Glass 7059
AG	Ag	187 2066	Silver
AL	Al	183 2479	Aluminum
AL2O3	Al2O3	250 900	Aluminum Oxide
AL2O3P	Al2O3	206 2479	Aluminum Oxide (Palik)
ALAS	AlAs	221 2479	Aluminum Arsenide
ALCU	AlCu	250 900	Aluminum Copper
ALON	AlON	399 2479	Aluminum Oxynitride
ALSB	AlSb	213 2479	Aluminum Antimonide
ALSI	AlSi	250 800	Aluminum Silicon
ALSITI	AlSiTi	250 800	Aluminum Silicon Titanium
ARACHI			
ASI	a-Si	250 840	Amorphous Silicon
AU	Au	206 2479	Gold
BAF2	BaF2	200 2000	Barium Fluoride
BK7	BK7	190 1239	Glass BK7
CAF2	CaF2	190 1239	Calcium Fluoride
CARBAM	a-C	300 840	Amorphous Carbon
CCL4	CCl4	250 900	Hexachloromethane
CDSE	CdSe	190 2479	Cadmium Selenide
CDTE	CdTe	247 2479	Cadmium Telluride
CO	Co	250 900	Cobalt (bulk)
CO_2	Co	187 1907	Cobalt (hexagon thin films)
COR7059	7059	440 650	Glass Corning 7059
COSI2-4	CoSi2	258 1239	Cobalt Silicide
CR	Cr	206 1239	Chromium
CR3SI	CrSi3	210 12398	Chromium Silicide
CR5SI3	Cr5Si3	210 12398	Chromium Silicide
CRSI2EL2	CrSi2	53 112	Chromium Silicide
CU	Cu	190 2479	Copper
CU2O	Cu2O	295 2479	Cuprous Oxide
CUO	CuO	295 2479	Cupric Oxide
DIAM	C	213 2479	Cubic Carbon (diamond)
FESI2EL1	FeSi2	137 275	Iron Silicide
FESI2EL2	FeSi2	53 112	Iron Silicide
FESI2EPI	FeSi2	247 6199	Iron Silicide
GAAS	GaAs	206 2479	Gallium Arsenide
GAAS100	GaAs	234 840	Gallium Arsenide (100)
GAAS111	GaAs	234 840	Gallium Arsenide (111)
GAASO	GaAsO	206 1239	Gallium Arsenide Oxide
GAASOX	GaAsO	206 774	Gallium Arsenide Oxide
GAP	GaP	206 2479	Gallium Phosphide
GAP100	GaP	234 840	Gallium Phosphide (100)
GAPOX	GaPO	206 774	Gallium Phosphide Oxide
GASB	GaSb	206 991	Gallium Antimonide
GASBOX	GaSbO	206 774	Gallium Antimonide Oxide
GE	Ge	206 2479	Germanium
GE100	Ge	240 840	Germanium (100)
H2O	H2O	206 826	Water

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HFO2	HfO2	250	900	Hafnium Oxide
HFSi2	HfSi2	130	24797	Hafnium Silicide
INAs	InAs	206	1239	Indium Arsenide
INAsOX	InAsO	206	774	Indium Arsenide Oxide
INGAAs	In _{0.53} Ga _{0.74} As	206	1239	Indium Gallium Arsenide
INP	InP	206	2479	Indium Phosphide
INPOX	OnPO	206	774	Indium Phosphide Oxide
INSB	InSb	206	1239	Indium Antimonide
INSBOX	InSbO	206	774	Indium Antimonide Oxide
IR	Ir	190	2479	Iridium
IR3Si5E	Ir3Si5	151	302	Iridium Silicide
IR3Si5P	Ir3Si5	225	2066	Iridium Silicide
ITO2	ITO	250	850	Indium Tin Oxide
KCL	KCl	206	2479	Potassium Chloride
LASF9	LASF9	210	1239	Glass LASF9
LI	Li	183	1180	Lithium
LIF	LiF	206	2479	Lithium Fluoride
MGF2	MgF2	250	900	Magnesium Fluoride
MO	Mo	190	2479	Molybdenum
MOSi2-A	MoSi2	281	1239	Molybdenum Silicide (parallel to c axis)
MOSi2-B	MoSi2	281	1239	Molybdenum Silicide (perpendicular to c axis)
NBSi-A	NbSi2	206	24797	Niobium Silicide (parallel to c axis)
NBSi-B	NbSi2	206	24797	Niobium Silicide (perpendicular to c axis)
NI	Ni	190	2479	Nickel
NI2Si	Ni2Si	213	12398	Nickel Silicide
NI3Si	Ni3Si	213	12398	Nickel Silicide
NISi	NiSi	213	12398	Nickel Silicide
OS	Os	206	2479	Osmium
P_SIAS	SiAs	240	840	Silicon Arsenide
P_SIUD	Si	240	840	Polysilicon (heavy As doped)
PBS	PbS	199	2479	Lead Sulfide
PBSE	PbSe	206	1239	Lead Selenide
PD	Pd	190	2479	Palladium
PD2Si-A	Pd2Si	177	12398	Palladium Silicide (perpendicular to c axis)
PD2Si-B	Pd2Si	177	12398	Palladium Silicide (parallel to c axis)
PT	Pt	206	2479	Platinum
RESI1-75	ReSi1.75	103	12398	Rhenium Silicide
RH	Rh	206	2479	Rhodium
SF11	SF11	210	1239	Glass SF11
SI100_2	Si	230	840	Crystalline Silicon (100 orientation)
SI110	Si	230	840	Crystalline Silicon (110 orientation)
SI111	Si	230	840	Crystalline Silicon (111 orientation)
Si3N4	Si3N4	154	1239	Silicon Nitride
SIAM1	a-Si	206	2066	Amorphous Silicon
SIAM2	a-Si	206	1239	Amorphous Silicon
SIC	SiC	190	1250	Silicon Carbide
SICR	Si	163	2479	Crystalline Silicon
SIGE_GE	SiGe	240	840	Silicon Germanium alloy on Germanium
SIGE_SI	SiGe	240	840	Silicon Germanium alloy on Silicon
SIO	SiO	210	2066	Silicon Monoxide
SiO2	SiO2	163	2066	Silicon Dioxide

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SIOP	SiO	190	1907	Silicon Monoxide
SIPORE	Si	210	1239	Porous Silicon
TA	Ta	180	2480	Tantalum
TAOX1	Ta ₂ O ₅	300	850	Tantalum Oxide
TAOX2	Ta ₂ O ₃	250	850	Tantalum Oxide
TASI2-A	TaSi ₂	123	24797	Tantalum Silicide (perpendicular to c axis)
TASI2-B	TaSi ₂	123	24797	Tantalum Silicide (parallel to c axis)
THF4	ThF ₄	221	1907	Thorium Fluoride
TI	Ti	206	1239	Titanium
TINI	TiN	250	900	Titanium Nitride
TIO2	TiO ₂	180	1500	Titanium Dioxide (probably crystal)
TIO2B	TiO ₂	220	2420	Titanium Dioxide (probably crystal)
TISI-A	TiSi ₂	63	12398	Titanium Silicide
V	V	206	1279	Vanadium
VS12-A	VSi ₂	253	24797	Vanadium Silicide (perpendicular to c axis)
VS12-B	VSi ₂	253	24797	Vanadium Silicide (parallel to c axis)
W	W	190	2479	Tungsten
WS12-A	WSi ₂	165	12398	Tungsten Silicide (perpendicular to c axis)
WS12-B	WSi ₂	165	12398	Tungsten Silicide (parallel to c axis)
Y2O3	Y ₂ O ₃	206	2479	Yttrium Oxide
ZNSCUB	ZnS	206	1239	Zinc Sulfide (cubic)
ZNSE	ZnSe	190	1239	Zinc Selenide
ZRO2	ZrO ₂	250	850	Zirconium Oxide
ZRSI2	ZrSi ₂	413	688	Zirconium Silicide

Filename	Symbol	Range (nm)		Description
Temperature Dependent Data (°C)				
ALAS028T	AlAs	275	987	Aluminum Arsenide (Temp: 28 C)
ALAS052T	AlAs	275	987	Aluminum Arsenide (Temp: 52 C)
ALAS072T	AlAs	275	987	Aluminum Arsenide (Temp: 72 C)
ALAS098T	AlAs	275	987	Aluminum Arsenide (Temp: 98 C)
ALAS125T	AlAs	275	987	Aluminum Arsenide (Temp: 125 C)
ALAS152T	AlAs	275	987	Aluminum Arsenide (Temp: 152 C)
ALAS178T	AlAs	275	987	Aluminum Arsenide (Temp: 178 C)
ALAS204T	AlAs	275	987	Aluminum Arsenide (Temp: 204 C)
ALAS228T	AlAs	275	987	Aluminum Arsenide (Temp: 228 C)
ALAS305T	AlAs	275	987	Aluminum Arsenide (Temp: 305 C)
ALAS331T	AlAs	275	987	Aluminum Arsenide (Temp: 331 C)
ALAS361T	AlAs	275	987	Aluminum Arsenide (Temp: 361 C)
ALAS390T	AlAs	275	987	Aluminum Arsenide (Temp: 390 C)
ALAS421T	AlAs	275	987	Aluminum Arsenide (Temp: 421 C)
ALAS445T	AlAs	275	987	Aluminum Arsenide (Temp: 445 C)
ALAS469T	AlAs	275	987	Aluminum Arsenide (Temp: 469 C)
ALAS499T	AlAs	275	987	Aluminum Arsenide (Temp: 499 C)
ALAS527T	AlAs	275	987	Aluminum Arsenide (Temp: 527 C)
ALAS552T	AlAs	275	987	Aluminum Arsenide (Temp: 552 C)
ALAS578T	AlAs	275	987	Aluminum Arsenide (Temp: 578 C)
ALAS602T	AlAs	275	987	Aluminum Arsenide (Temp: 602 C)
ALAS626T	AlAs	275	987	Aluminum Arsenide (Temp: 626 C)
GAAS031T	GaAs	275	999	Gallium Arsenide (Temp: 31 C)
GAAS041T	GaAs	275	999	Gallium Arsenide (Temp: 41 C)

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GAAS060T	GaAs	275	999	Gallium Arsenide (Temp: 60 C)
GAAS081T	GaAs	275	999	Gallium Arsenide (Temp: 81 C)
GAAS103T	GaAs	275	999	Gallium Arsenide (Temp: 103 C)
GAAS126T	GaAs	275	999	Gallium Arsenide (Temp: 126 C)
GAAS150T	GaAs	275	999	Gallium Arsenide (Temp: 150 C)
GAAS175T	GaAs	275	999	Gallium Arsenide (Temp: 175 C)
GAAS199T	GaAs	275	999	Gallium Arsenide (Temp: 199 C)
GAAS224T	GaAs	275	999	Gallium Arsenide (Temp: 224 C)
GAAS249T	GaAs	275	999	Gallium Arsenide (Temp: 249 C)
GAAS273T	GaAs	275	999	Gallium Arsenide (Temp: 273 C)
GAAS297T	GaAs	275	999	Gallium Arsenide (Temp: 297 C)
GAAS320T	GaAs	275	999	Gallium Arsenide (Temp: 320 C)
GAAS344T	GaAs	275	999	Gallium Arsenide (Temp: 344 C)
GAAS367T	GaAs	275	999	Gallium Arsenide (Temp: 367 C)
GAAS391T	GaAs	275	999	Gallium Arsenide (Temp: 391 C)
GAAS415T	GaAs	275	999	Gallium Arsenide (Temp: 415 C)
GAAS443T	GaAs	275	999	Gallium Arsenide (Temp: 443 C)
GAAS465T	GaAs	275	999	Gallium Arsenide (Temp: 465 C)
GAAS488T	GaAs	275	999	Gallium Arsenide (Temp: 488 C)
GAAS515T	GaAs	275	999	Gallium Arsenide (Temp: 515 C)
GAAS546T	GaAs	275	999	Gallium Arsenide (Temp: 546 C)
GAAS579T	GaAs	275	999	Gallium Arsenide (Temp: 579 C)
GAAS603T	GaAs	275	999	Gallium Arsenide (Temp: 603 C)
GAAS634T	GaAs	275	999	Gallium Arsenide (Temp: 634 C)
SICR-T02	Si	263	826	Crystalline Silicon (Temp: 20 C)
SICR-T10	Si	263	826	Crystalline Silicon (Temp: 100 C)
SICR-T15	Si	263	826	Crystalline Silicon (Temp: 150 C)
SICR-T20	Si	263	826	Crystalline Silicon (Temp: 200 C)
SICR-T25	Si	263	826	Crystalline Silicon (Temp: 250 C)
SICR-T30	Si	263	826	Crystalline Silicon (Temp: 300 C)
SICR-T35	Si	263	826	Crystalline Silicon (Temp: 350 C)
SICR-T40	Si	263	826	Crystalline Silicon (Temp: 400 C)
SICR-T45	Si	263	826	Crystalline Silicon (Temp: 450 C)

Filename	Symbol	Range (nm)	Description
Compositionally Varying Data			
ALGAINP	AlGaInP	225 1000	Aluminum Gallium Indium Phosphide (varying Al fraction 0-100%: 50% In and P)
ALGAINP00	(Al ₀ Ga ₁) _{0.5} In _{0.5} P	225 1000	Aluminum Gallium Indium Phosphide (0% Al)
ALGAINP10	(Al _{0.1} Ga _{0.9}) _{0.5} In _{0.5} P	225 1000	Aluminum Gallium Indium Phosphide (10% Al)
ALGAINP30	(Al _{0.3} Ga _{0.7}) _{0.5} In _{0.5} P	225 1000	Aluminum Gallium Indium Phosphide (30% Al)
ALGAINP60	(Al _{0.6} Ga _{0.4}) _{0.5} In _{0.5} P	225 1000	Aluminum Gallium Indium Phosphide (60% Al)
ALGAINP70	(Al _{0.7} Ga _{0.3}) _{0.5} In _{0.5} P	225 1000	Aluminum Gallium Indium Phosphide (70% Al)
ALGAINP100	(Al ₁ Ga ₀) _{0.5} In _{0.5} P	225 1000	Aluminum Gallium Indium Phosphide (100% Al)
ALGAAS	AlGaAs	206 2479	Aluminum Gallium Arsenide (varying Al fraction 0-100%)
ALGAAS00	GaAs	206 2479	Aluminum Gallium Arsenide (0% Al)
ALGAAS10	Al _{0.099} Ga _{0.901} As	206 826	Aluminum Gallium Arsenide (10% Al)
ALGAAS20	Al _{0.198} Ga _{0.802} As	206 826	Aluminum Gallium Arsenide (20% Al)
ALGAAS30	Al _{0.315} Ga _{0.685} As	206 826	Aluminum Gallium Arsenide (30% Al)

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ALGAAS40	Al _{0.419} Ga _{0.581} As	206	826	Aluminum Gallium Arsenide (40% Al)
ALGAAS50	Al _{0.491} Ga _{0.509} As	206	826	Aluminum Gallium Arsenide (50% Al)
ALGAAS60	Al _{0.590} Ga _{0.410} As	206	826	Aluminum Gallium Arsenide (60% Al)
ALGAAS70	Al _{0.700} Ga _{0.300} As	206	826	Aluminum Gallium Arsenide (70% Al)
ALGAAS80	Al _{0.804} Ga _{0.196} As	206	826	Aluminum Gallium Arsenide (80% Al)
ALGAAS90	Al _{0.901} Ga _{0.099} As	206	826	Aluminum Gallium Arsenide (90% Al)
ALGAAS100	AlAs	206	2479	Aluminum Gallium Arsenide (100% Al)
HGCDTE	HgCdTe	200	900	Mercury Cadmium Telluride (varying Cd fraction 0-29%)
HGCDTE0	HgTe	200	900	Mercury Cadmium Telluride (0% Cd)
HGCDTE2	Hg _{0.8} Cd _{0.2} Te	200	900	Mercury Cadmium Telluride (20% Cd)
HGCDTE3	Hg _{0.71} Cd _{0.29} Te	200	900	Mercury Cadmium Telluride (29% Cd)
INGASB	InGaSb	225	825	Indium Gallium Antimonide (varying Ga fraction 0-100%)
INGASB0	InSb	225	825	Indium Gallium Antimonide (0% Ga)
INGASB1	In _{0.9} Ga _{0.1} Sb	225	825	Indium Gallium Antimonide (10% Ga)
INGASB3	In _{0.7} Ga _{0.3} Sb	225	825	Indium Gallium Antimonide (30% Ga)
INGASB5	In _{0.5} Ga _{0.5} Sb	225	825	Indium Gallium Antimonide (50% Ga)
INGASB7	In _{0.3} Ga _{0.7} Sb	225	825	Indium Gallium Antimonide (70% Ga)
INGASB9	In _{0.1} Ga _{0.9} Sb	225	825	Indium Gallium Antimonide (90% Ga)
INGASB10	GaSb	225	825	Indium Gallium Antimonide (100% Ga)
RESIGE	Relaxed SiGe	163	Varies*	Relaxed Silicon Germanium (varying Ge fraction 11-100%)
RESIGE0	Si _{0.89} Ge _{0.11}	163	2479	Silicon Germanium alloy (relaxed: 11% Ge)
RESIGE22	Si _{0.78} Ge _{0.22}	163	729	Silicon Germanium alloy (relaxed: 22% Ge)
RESIGE39	Si _{0.61} Ge _{0.39}	163	729	Silicon Germanium alloy (relaxed: 39% Ge)
RESIGE51	Si _{0.49} Ge _{0.51}	164	729	Silicon Germanium alloy (relaxed: 51% Ge)
RESIGE64	Si _{0.36} Ge _{0.64}	165	729	Silicon Germanium alloy (relaxed: 64% Ge)
RESIGE75	Si _{0.25} Ge _{0.75}	166	729	Silicon Germanium alloy (relaxed: 75% Ge)
RESIGE83	Si _{0.17} Ge _{0.83}	167	729	Silicon Germanium alloy (relaxed: 83% Ge)
RESIGE91	Si _{0.09} Ge _{0.91}	168	729	Silicon Germanium alloy (relaxed: 91% Ge)
RESIGE1	Ge	163	2479	Silicon Germanium alloy (relaxed: 100% Ge)
REINGAAS	Relaxed InGaAs	206	Varies*	Relaxed Indium Gallium Arsenide (varying In fraction 0-24%)
REINGAS0	GaAs	206	2479	Indium Gallium Arsenide (relaxed: 0% In)
RINGAS10	In _{0.1} Ga _{0.9} As	206	840	Indium Gallium Arsenide (relaxed: 10% In)
RINGAS20	In _{0.2} Ga _{0.8} As	206	954	Indium Gallium Arsenide (relaxed: 20% In)
RINGAS24	In _{0.24} Ga _{0.76} As	206	8265	Indium Gallium Arsenide (relaxed: 24% In)
SIGE	SiGe	240	840	Silicon Germanium (varying Si fraction 11-98%)
SI11GE89	Si _{0.11} Ge _{0.89}	240	840	Silicon Germanium alloy (11% Si)
SI20GE80	Si _{0.20} Ge _{0.80}	240	840	Silicon Germanium alloy (20% Si)
SI28GE72	Si _{0.28} Ge _{0.74}	240	840	Silicon Germanium alloy (28% Si)
SI65GE35	Si _{0.65} Ge _{0.35}	240	840	Silicon Germanium alloy (65% Si)
SI85GE15	Si _{0.85} Ge _{0.15}	240	840	Silicon Germanium alloy (85% Si)
SI98GE02	Si _{0.98} Ge _{0.02}	240	840	Silicon Germanium alloy (98% Si)
STINGAAS	Strained InGaAs	240	840	Strained Indium Gallium Arsenide (varying In fraction 0-24%)
SINGAS0	GaAs	240	840	Indium Gallium Arsenide (strained: 0% In)
SINGAS10	In _{0.1} Ga _{0.9} As	240	840	Indium Gallium Arsenide (strained: 10% In)
SINGAS20	In _{0.2} Ga _{0.8} As	240	840	Indium Gallium Arsenide (strained: 20% In)
SINGAS24	In _{0.24} Ga _{0.76} As	240	840	Indium Gallium Arsenide (strained: 24% In)

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SION	SiON	250	800	Silicon Oxynitride (varying N fraction 10-80%)
SION0	SiO	250	800	Silicon Oxynitride (10% N)
SION20	SiO0.8N0.2	250	800	Silicon Oxynitride (20% N)
SION40	SiO0.6N0.4	250	800	Silicon Oxynitride (40% N)
SION60	SiO0.4N0.6	250	800	Silicon Oxynitride (60% N)
SION80	SiO0.2N0.8	250	800	Silicon Oxynitride (80% N)
SIPOLY	Si	210	1239	Polysilicon
SIPOLY10	Poly Si	190	2479	
SIPOLY20	Poly Si	191	2479	
SIPOLY30	Poly Si	192	2479	
SIPOLY40	Poly Si	193	2479	
SIPOLY50	Poly Si	194	2479	
SIPOLY60	Poly Si	195	2479	
SIPOLY70	Poly Si	196	2479	
SIPOLY80	Poly Si	197	2479	
SIPOLY90	Poly Si	198	2479	
STSIGE	Strained SiGe	275	619	Strained Silicon Germanium (varying Ge fraction 0-22%)
STSG0	Si	275	619	Silicon Germanium alloy (strained: 0% Ge)
STSG064	Si0.94Ge0.06	275	619	Silicon Germanium alloy (strained: 6% Ge)
STSG123	Si0.88Ge0.12	275	619	Silicon Germanium alloy (strained: 12% Ge)
STSG169	Si0.83Ge0.17	275	619	Silicon Germanium alloy (strained: 17% Ge)
STSG229	Si0.78Ge0.22	275	619	Silicon Germanium alloy (strained: 22% Ge)
ZNCDTE	ZnCdTe	229	1127	Zinc Cadmium Telluride (varying Cd fraction 0-100%)
ZNCDTE0	ZnTe	229	1127	Zinc Cadmium Telluride (0% Cd)
ZNCDTE1	Zn0.9Cd0.1Te	229	1127	Zinc Cadmium Telluride (10% Cd)
ZNCDTE3	Zn0.7Cd0.3Te	229	1127	Zinc Cadmium Telluride (30% Cd)
ZNCDTE5	Zn0.5Cd0.5Te	229	1127	Zinc Cadmium Telluride (50% Cd)
ZNCDTE7	Zn0.3Cd0.7Te	229	1127	Zinc Cadmium Telluride (70% Cd)
ZNCDTE9	Zn0.1Cd0.9Te	229	1127	Zinc Cadmium Telluride (90% Cd)
ZNCDTE10	CdTe	229	1127	Zinc Cadmium Telluride (100% Cd)
ZNSETE	ZnSeTe	196	1771	Zinc Selenium Telluride (varying Te fraction 0-100%)
ZNSETE0	ZnSe	196	1771	Zinc Selenium Telluride (0% Te) *
ZNSETE1	ZnSe0.9Te0.1	196	1771	Zinc Selenium Telluride (10% Te) *
ZNSETE3	ZnSe0.7Te0.3	196	1771	Zinc Selenium Telluride (30% Te) *
ZNSETE5	ZnSe0.5Te0.5	196	1771	Zinc Selenium Telluride (50% Te) *
ZNSETE7	ZnSe0.3Te0.7	196	1771	Zinc Selenium Telluride (70% Te) *
ZNSETE9	ZnSe0.1Te0.9	196	1771	Zinc Selenium Telluride (90% Te) *
ZNSETE10	ZnTe	196	1771	Zinc Selenium Telluride (100% Te) *