

Table S1. The details of the database as well as the references.

Formula	Temperature (K)	κ_L (W/(mK))
YbCd ₂ Sb ₂ ¹	298.03	2.05145
	323.645	1.93569
	352.217	1.83923
	373.892	1.72347
	398.522	1.66559
	422.167	1.55949
	447.783	1.53055
	475.369	1.43408
	500.985	1.36656
	520.69	1.32797
	548.276	1.2701
	573.892	1.22186
	598.522	1.18328
	626.108	1.16399
	650.739	1.1254
	673.399	1.10611
	700	1.10611
YbZn ₂ Sb ₂ ¹	300	3.79743
	327.586	3.67203
	347.291	3.55627
	374.877	3.44051
	399.507	3.34405
	422.167	3.26688
	447.783	3.17042
	474.384	3.06431
	497.044	2.96785
	526.601	2.88103
	550.246	2.79421
	575.862	2.7074
	604.433	2.60129
	625.123	2.51447
	646.798	2.41801
	676.355	2.36977
	696.059	2.28296
Sr ₃ AlSb ₃ ²	297.186	1.12421
	317.522	1.03575
	366.973	0.917565
	422.317	0.831995
	471.369	0.779173

	518.859	0.732904
	569.316	0.699675
	618.229	0.66973
	667.162	0.636517
	719.082	0.613076
	774.067	0.586333
	819.875	0.566226
	871.714	0.555858
	925.037	0.552009
	972.288	0.544958
Sr ₅ Al ₂ Sb ₆ ³	317	0.882
	374	0.774
	426	0.718
	469	0.701
	476	0.681
	525	0.649
	577	0.622
	625	0.609
	675	0.589
	727	0.563
	775	0.553
	824	0.547
	873	0.537
Ca ₅ In ₂ Sb ₆ ⁴	320.045	1.13117
	321.158	1.09783
	370.156	0.970541
	372.383	0.947615
	423.608	0.864068
	469.265	0.793045
	526.058	0.742808
	572.829	0.700947
	627.394	0.677803
	676.392	0.650515
	722.049	0.637825
	774.388	0.656357
Sr ₅ In ₂ Sb ₆ ⁴	304.454	1.0979
	324.499	1.05615
	373.497	0.93511
	374.61	0.922606
	425.835	0.851559
	471.492	0.795119
	523.831	0.753234
	573.942	0.721775
	622.94	0.713238

	673.051	0.717196
	720.935	0.700329
	777.728	0.760509
CaMg ₂ Bi ₂ ⁵	301.86	2.88589
	376.144	2.40007
	476.021	1.85354
	580.594	1.50105
	680.093	1.24459
	781.909	1.05423
	819.8	0.998862
	869.626	0.946854
YbMg ₂ Bi ₂ ⁵	298.68	2.58118
	372.736	2.22288
	473.97	1.72634
	579.458	1.38679
	676.809	1.14657
	779.062	0.973181
	816.393	0.91476
	864.098	0.865582
CaZn ₂ Sb ₂ ⁶	301.536	2.4715
	373.923	1.99156
	473.676	1.57264
	572.546	1.2948
	668.768	1.11202
	767.638	0.928848
EuZn ₂ Sb ₂ ⁷	300	2.62501
	348.93	2.22692
	401.07	2.03045
	450.802	1.84663
	500.535	1.72583
	551.872	1.61131
	600	1.50316
	651.337	1.45166
EuCd ₂ Sb ₂ ⁷	299.198	1.40864
	350.535	1.20588
	399.465	1.06619
	451.604	0.97056
	500.535	0.881297
	548.663	0.836168
	598.396	0.778401
	649.733	0.74581
Yb(Cd) ₂ Sb ₂ ⁷	297.61	2.05526
	337.712	1.81842
	375.852	1.64298

	411.396	1.50263
	450.162	1.37105
	488.266	1.27895
	525.078	1.19123
	562.524	1.12982
	599.315	1.09035
EuAgSb ⁸	306.691	0.949905
	374.165	0.774944
	476.625	0.658775
	579.084	0.547832
	629.065	0.500212
	679.045	0.457816
	784.004	0.190105
	732.378	0.305721
EuCuSb ⁸	306.691	1.84157
	374.165	1.57953
	476.625	1.22651
	576.585	1.00588
	629.065	0.876381
	676.546	0.799185
	729.025	0.629628
	785.1	0.376974
SrAgSb ⁸	306.691	1.59079
	371.666	1.40192
	474.126	1.13947
	574.212	0.992919
	629.226	0.905998
	677.364	0.843121
	732.378	0.703484
	783.954	0.616604
SrCd ₂ Sb ₂ ⁹	299.887	2.01743
	328.108	1.86417
	351.244	1.72701
	371.583	1.6031
	417.346	1.42041
	401.408	1.49541
	448.357	1.31361
	478.404	1.2366
	500	1.17362
	523.944	1.12457
	549.765	1.06854
	576.056	1.01947
	600.469	0.984372
	624.883	0.956252

	650.235	0.931612
	675.587	0.910461
	699.531	0.885834
Eu ₂ ZnSb ₂ ¹⁰	300	0.417532
	373.4694	0.398107
	473.1778	0.379586
	572.8863	0.36772
	621.8659	0.36772
	672.5948	0.36772
	721.5743	0.373606
	770.5539	0.385662
	821.2828	0.385662
EuMg ₂ Bi ₂ ¹⁰	305.2478	3.918352
	376.9679	2.897804
	474.9271	2.283603
	571.137	1.799585
	674.344	1.487352
	772.3032	1.209925
	875.5102	1.016007
Sr ₂ ZnSb ₂ ¹¹	300.1918	0.48666
	400.1342	0.339186
	499.7128	0.260407
Yb ₁₄ MnSb ₁₁ ¹²	302.7575	0.460227
	326.9316	0.467045
	351.1057	0.473864
	375.2799	0.480682
	401.3127	0.4875
	427.335	0.4875
	451.4986	0.4875
	477.5209	0.4875
	501.6898	0.490909
	525.8428	0.484091
	550.0011	0.480682
	576.0181	0.477273
	602.0298	0.470455
	626.1881	0.467045
	650.3464	0.463636
	676.3634	0.460227
	700.5164	0.453409
	726.5282	0.446591
	750.6917	0.446591
	776.7035	0.439773
	800.8618	0.436364
	825.0201	0.432955

	849.1784	0.429545
	877.0594	0.429545
	901.2177	0.426136
	925.3813	0.426136
	951.4036	0.426136
	975.5671	0.426136
	999.7254	0.422727
	1025.748	0.422727
	1051.77	0.422727
	1075.934	0.422727
	1100.097	0.422727
	1124.261	0.422727
	1150.283	0.422727
	1176.311	0.426136
	1200.479	0.429545
	1226.512	0.436364
	1250.686	0.443182
	1274.866	0.453409
Yb ₁₄ AlSb ₁₁ ¹³	350	0.66055
	473.0769	0.591743
	598.0769	0.582569
	725	0.610092
	848.0769	0.651376
	975	0.711009
	1100	0.784404
	1225	0.876147
Ca ₅ Al ₂ Sb ₆ ¹⁴	304.7374	1.526154
	326.7902	1.485128
	375.8727	1.288205
	426.7204	1.152821
	475.8902	1.037949
	525.0904	0.951795
	576.0035	0.877949
	625.2343	0.820513
	674.4737	0.771282
	725.4391	0.746667
	774.7047	0.722051
	825.6788	0.705641
	876.6572	0.693333
Sr ₃ GaSb ₃ ¹⁵	307.6451	1.061981
	331.2154	1.008307
	348.8802	0.97508
	372.4505	0.921406
	425.431	0.829393

	479.8128	0.773163
	526.8457	0.724601
	578.242	0.696486
	628.1759	0.665815
	675.1619	0.642812
	725.0912	0.614696
	776.4688	0.596805
	827.8463	0.578914
	874.7854	0.58147
	923.2102	0.573802
	974.5831	0.558466
CaCd ₂ Sb ₂ ¹⁶	298.5138	1.533469
	347.7707	0.997972
	398.7261	0.851927
	449.6815	0.827586
	498.9384	0.778905
	599.1507	0.705882
YbMn ₂ Sb ₂ ¹⁷	300	2.723404
	350.4	2.717021
	400.1	2.531915
	449.8	2.282979
	500.2	2.110638
	549.9	2.065957
	600.3	1.982979
	650	1.912766
BaCu ₂ Te ₂ ¹⁸	324.2616	0.610442
	373.8397	0.543601
	422.3629	0.458691
	474.0506	0.38928
	523.6287	0.374052
	573.2068	0.363985
	623.8397	0.37715
	672.3629	0.328368
	721.9409	0.284753
	772.5738	0.238563
	823.2068	0.236243
EuMg ₂ Sb ₂ ¹⁹	304.3478	3.706349
	351.087	3.198413
	401.087	2.746032
	450	2.444444
	500	2.174603
	550	1.968254
	600	1.785714
	650	1.642857

	700	1.52381
	748.913	1.412698
YbMg ₂ Sb ₂ ²⁰	305.4201	3.032051
	317.6152	2.786325
	373.1707	2.497863
	423.3062	2.241453
	472.0867	1.995726
	522.2222	1.792735
	575.0678	1.643162
	623.8482	1.514957
	673.9837	1.418803
	725.4743	1.344017
	778.3198	1.247863
BaCd ₂ As ₂ ²¹	300	2.833992
	322.541	2.501976
	371.7213	2.146245
	422.9508	1.897233
	473.1557	1.743083
	523.3607	1.588933
	573.5656	1.458498
	623.7705	1.363636
	672.9508	1.280632
	723.1557	1.221344
	773.3607	1.173913
SrZn ₂ Sb ₂ ²²	330.4514	1.927374
	352.5785	1.832402
	374.7055	1.73743
	396.8325	1.642458
	421.7361	1.558659
	448.4898	1.480447
	473.3985	1.407821
	498.3098	1.340782
	524.1501	1.284916
	549.9852	1.217877
	574.9042	1.167598
	600.747	1.117318
	623.8211	1.072626
	651.5115	1.022346
	676.4383	0.988827
	701.3676	0.960894
	726.297	0.932961

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