

Synthesis, Structure, and Properties of EuLnCuSe₃ (Ln = Nd, Sm, Gd, Er)

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Supporting information

Table S1. Coordinates of atoms in the EuErCuSe₃ compound.

Atom label	x	Y	z
Cu1	0	0.4710(2)	0.75
Er1	0.5	0.500000	0.5
Eu1	0	0.75105(9)	0.75
Se1	0	0.35964(11)	0.56416(15)
Se2	0.5	0.57885(15)	0.75

Table S2. Bond lengths in EuErCuSe₃ structure.

Cu1—Se1	2.448 (2)	Er1—Se1	2.8420 (10)
Cu1—Se1 ⁱ	2.448 (2)	Er1—Se1 ^{vii}	2.8420 (10)
Cu1—Se2	2.487 (2)	Er1—Se1 ^{viii}	2.8420 (10)
Cu1—Se2 ⁱⁱ	2.487 (2)	Er1—Se1 ^{ix}	2.8420 (10)
Cu1—Er1 ⁱⁱⁱ	3.3316 (4)	Eu1—Se2 ⁱⁱ	3.0662 (18)
Cu1—Er1 ⁱⁱ	3.3316 (4)	Eu1—Se2	3.0662 (18)
Cu1—Er1 ^{iv}	3.3316 (4)	Eu1—Se1 ^x	3.1614 (13)
Cu1—Er1	3.3316 (4)	Eu1—Se1 ^{xi}	3.1614 (13)
Cu1—Eu1 ^v	3.570 (2)	Eu1—Se1 ^{xii}	3.1614 (13)
Cu1—Eu1 ^{vi}	3.570 (2)	Eu1—Se1 ^{xiii}	3.1614 (13)
Cu1—Eu1	3.740 (3)	Eu1—Se1 ^{viii}	3.6035 (16)
Er1—Se2 ^{vii}	2.8192 (8)	Eu1—Se1 ^{iv}	3.6035 (16)
Er1—Se2	2.8192 (8)	Eu1—Eu1 ⁱⁱ	4.0555 (3)

Symmetry code(s): (i) x, y, -z+3/2; (ii) x-1, y, z; (iii) -x+1, -y+1, z+1/2; (iv) -x, -y+1, z+1/2; (v) x-1/2, y-1/2, z; (vi) x+1/2, y-1/2, z; (vii) -x+1, -y+1, -z+1; (viii) -x, -y+1, -z+1; (ix) x+1, y, z; (x) x+1/2, y+1/2, -z+3/2; (xi) x-1/2, y+1/2, z; (xii) x-1/2, y+1/2, -z+3/2; (xiii) x+1/2, y+1/2, z.