

SUPPLEMENTARY INFORMATION

In search of the elusive amalgam SrHg₈: a mercury-rich intermetallic with augmented pentagonal prisms

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Table S1 Selected interatomic distances in SrHg₈

Figure S1 Hg-centred coordination polyhedra in SrHg₈, classified into (a) augmented tetragonal prisms and (b) augmented trigonal prisms. The blue circles are Sr atoms and the red circles are Hg atoms.

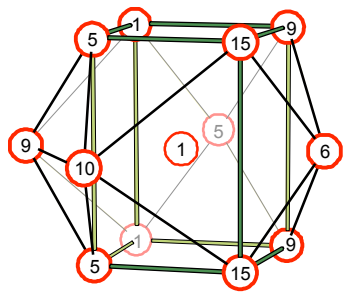
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Table S1 Selected interatomic distances in SrHg₈^a

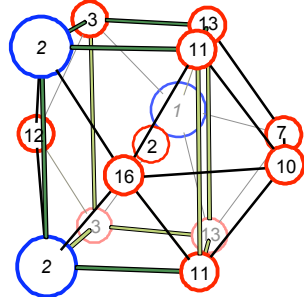
	Sr1 CN15+3	Sr2 CN16+2	Hg1 CN12	Hg2 CN13	Hg3 CN12	Hg4 CN11	Hg5 CN12	Hg6 CN13	Hg7 CN13	Hg8 CN12	Hg9 CN13	Hg10 CN12	Hg11 CN11	Hg12 CN9	Hg13 CN10	Hg14 CN11	Hg15 CN10	Hg16 CN11
Sr1				3.723	3.470 ²	3.442 ²		3.702	3.698 3.703	3.433 ²		3.932			3.529 ²		3.533 ²	
Sr2				3.583 ²	3.593			3.609 ²		3.545	3.451		3.392	3.471 ²		3.405 ² 3.884		3.474 ² 3.750
Hg1	(4.030)		3.585 ²				2.879 3.110 ²	3.063			3.447 3.803 ²	2.997					2.986 ²	
Hg2	3.723	3.583 ²			3.621 ²				3.107			3.588	3.191 ²	2.904	3.040 ²			2.950
Hg3	3.470 ²	3.593		3.621 ²		2.856			3.501 ²	2.968				2.942 ²	2.884			
Hg4	3.442 ²				2.856		3.289		3.172 ²			3.012 ²	3.163		3.471		3.004	
Hg5			2.879 3.110 ²			3.289		3.717			3.063 ²	3.098 ²	3.072			3.422	3.212	
Hg6	3.702	3.609 ²	3.063				3.717			3.434 ²	3.212 ²			2.905		2.957	3.196 ²	
Hg7	3.698 3.703			3.107	3.501 ²	3.172 ²				3.661 ²		2.973		2.933	3.010 ²			
Hg8	3.433 ²	3.545			2.968			3.434 ²	3.661 ²					3.016 ²	2.879		2.882	
Hg9		3.451	3.447 3.803 ²				3.063 ²	3.212 ²				3.238				3.200 ²	3.084	3.156
Hg10	3.932		2.997	3.588		3.012 ²	3.098 ²		2.973		3.238		3.098 ²					3.502
Hg11		3.392		3.191 ²		3.163	3.072					3.098 ²			2.999	3.044		3.132 ²
Hg12	(4.067) (4.136)	3.471 ²		2.904	2.942 ²			2.905	2.933	3.016 ²								
Hg13	3.529 ²	(4.358)		3.040 ²	2.884	3.471			3.010 ²	2.879			2.999					
Hg14		3.405 ² 3.884					3.422	2.957			3.200 ²		3.044					2.947 ² 3.007
Hg15	3.533 ²	(4.670)	2.986 ²			3.004	3.212	3.196 ²		2.882	3.084							
Hg16		3.474 ² 3.750		2.950							3.156	3.502	3.132 ²			2.947 ² 3.007		

^a Standard uncertainties range from 0.001 to 0.003 Å. A distance cutoff of 4.0 Å was used; slightly longer distances around the coordination environment of Sr atoms are also indicated. When read down, the number of distances listed (superscripts indicate the number of times a distance occurs) corresponds to the CN in the column header.

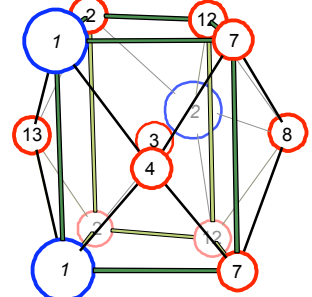
(a)



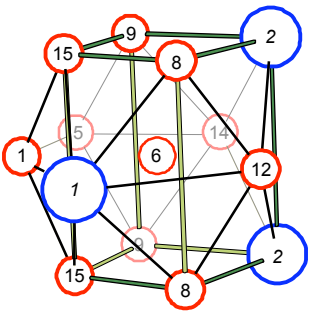
Hg1 CN12



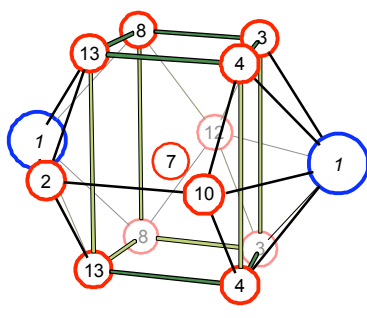
Hg2 CN13



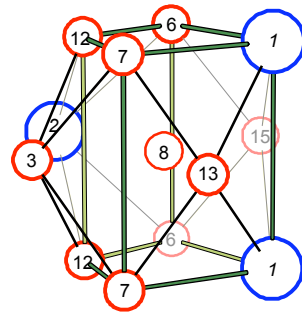
Hg3 CN12



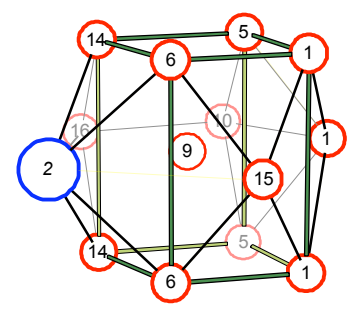
Hg6 CN13



Hg7 CN13

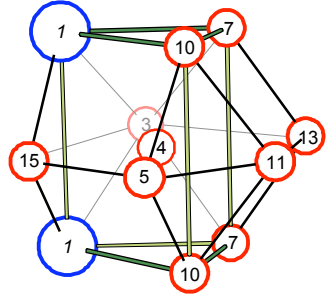


Hg8 CN12

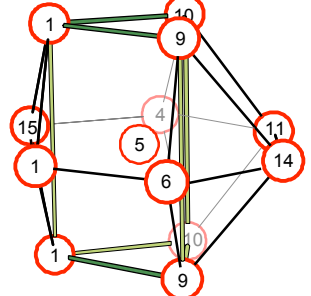


Hg9 CN13

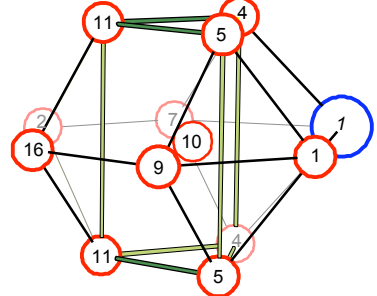
(b)



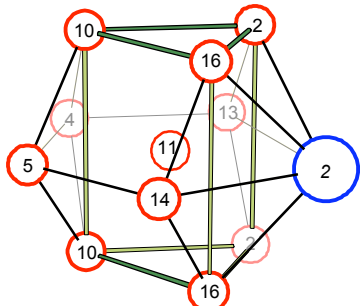
Hg4 CN11



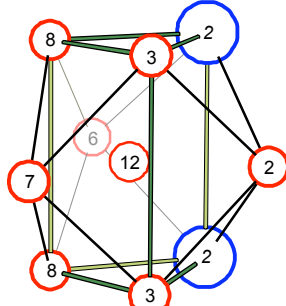
Hg5 CN12



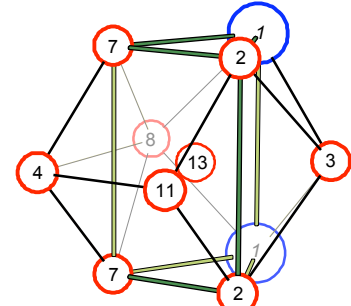
Hg10 CN12



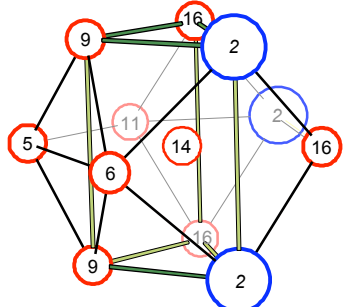
Hg11 CN11



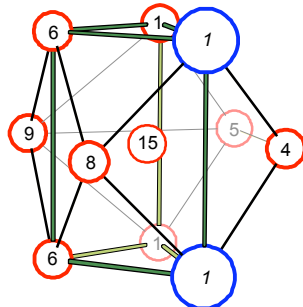
Hg12 CN9



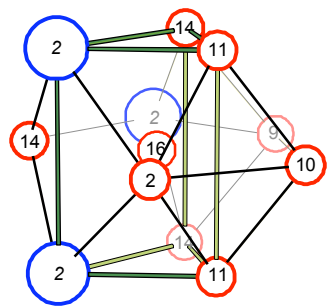
Hg13 CN10



Hg14 CN11



Hg15 CN10



Hg16 CN11