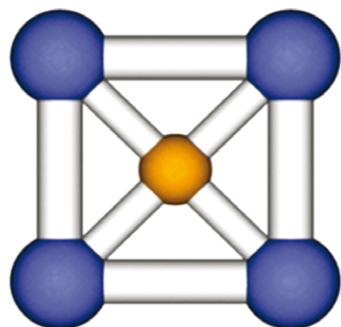
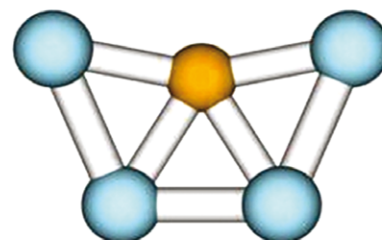


**Aromatic****SiIn<sub>4</sub><sup>2-</sup>****VS****Covalent****SiAl<sub>4</sub><sup>2-</sup>**

13	14	15
2 5 B	2 6 C	2 7 N
3 13 Al	3 14 Si	3 15 P
4 31 Ga	4 32 Ge	4 33 As
5 49 In	5 50 Sn	5 51 Sb

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2 5 B	2 6 C	2 7 N
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Showcasing research from the laboratory of  
Anastassia Alexandrova at the University of California,  
Los Angeles, USA

Title: Selected AB<sub>4</sub><sup>2-/-</sup> (A = C, Si, Ge; B = Al, Ga, In) ions: a battle  
between covalency and aromaticity, and prediction of square  
planar Si in SiIn<sub>4</sub><sup>2-/-</sup>

In small clusters, aromaticity and covalency are two chemical  
bonding effects that turn out to oppose each other in defining  
cluster structures. They were used as two levers of cluster design,  
and a new cluster containing square planar Si was predicted.

As featured in:



See Alexandrova et al., *Phys. Chem. Chem. Phys.*, 2012, **14**, 14815.

[www.rsc.org/pccp](http://www.rsc.org/pccp)

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