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CORRECTION

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# Correction: Spectroscopic observation of two-center three-electron bonded (hemi-bonded) structures of $(H_2S)_n^+$ clusters in the gas phase

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Correction for 'Spectroscopic observation of two-center three-electron bonded (hemi-bonded) structures of $(H_2S)_n^+$ clusters in the gas phase' by Dandan Wang *et al.*, *Chem. Sci.*, 2017, **8**, 2667–2670.



The authors regret that some important references were omitted from the original article. These references are presented herein.

The experimental observation of the sulfur–sulfur hemi-bond was pioneered by Asmus and coworkers.[1–6] They observed transient absorption due to the σ*–σ electronic transition in solution. Moreover, they observed the transient absorptions of the hemi-bonds of sulfa with a variety of counter atoms as well as those of N–N and I–I hemi-bonds.[7–11] The electronic spectrum of $(H_2S)_2^+$ in aqueous solution was also reported by Asmus, though detailed structural information is difficult to extract from the broadened electronic transition.[3]

The S–S hemi-bond in gas phase molecules was first reported using mass spectrometry.[5] The stable dimer cation formation of bis(isopropyl)sulfide was observed and hemi-bond formation was proposed on the basis of the fragmentation pattern. Gas phase dimerization equilibrium measurement of dimethyl sulfide cations has also suggested formation of the S–S hemi-bond.[12] Very recently, infrared Stark spectroscopy was applied to $Cl–NH_3$ in He droplets,[13] and hemi-bond formation was concluded by the shift of the NH stretch and dipole moment measurements. This result is consistent with the prediction by high level computation of similar systems.[14]

Theoretical calculations of the S–S hemi-bond were first performed by Clark for $(H_2S)_2^+$,[15] and the series of his study has been extended to a variety of hemi-bonded systems.[16–18]

The Royal Society of Chemistry apologises for these errors and any consequent inconvenience to authors and readers.

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