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Title:	Encapsulation of paramagnetic diatomic molecules B ₂ , O ₂ and Ge ₂ inside C ₆₀
Authors:	Equbal, Asif (/jspui/browse?type=author&value=Equbal%2C+Asif) Srinivasan, S. (/jspui/browse?type=author&value=Srinivasan%2C+S.) Sathyamurthy, N. (/jspui/browse?type=author&value=Sathyamurthy%2C+N.)
Keywords:	Paramagnetic Diatomic Encapsulation
Issue Date:	2014
Publisher:	Elsevier
Citation:	Chemical Physics Letters, 610-611, pp.251-255.
Abstract:	Density functional theoretic (DFT) calculations have been carried out for B ₂ @C ₆₀ , O ₂ @C ₆₀ and Ge ₂ @C ₆₀ to study the influence of confinement on the relative stability between the singlet and the triplet states of paramagnetic diatomic molecules B ₂ , O ₂ and Ge ₂ . Although the energy gap between the respective singlet and triplet states of B ₂ and O ₂ remains unaltered on encapsulation inside the C ₆₀ cage, the relative stability of the singlet and triplet states of the complex Ge ₂ @C ₆₀ varies with the orientation of Ge ₂ inside the cage. Unlike that of B ₂ and O ₂ , the bond length of Ge ₂ is reduced significantly inside the cage.
Description:	Only IISERM authors are available in the record.
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