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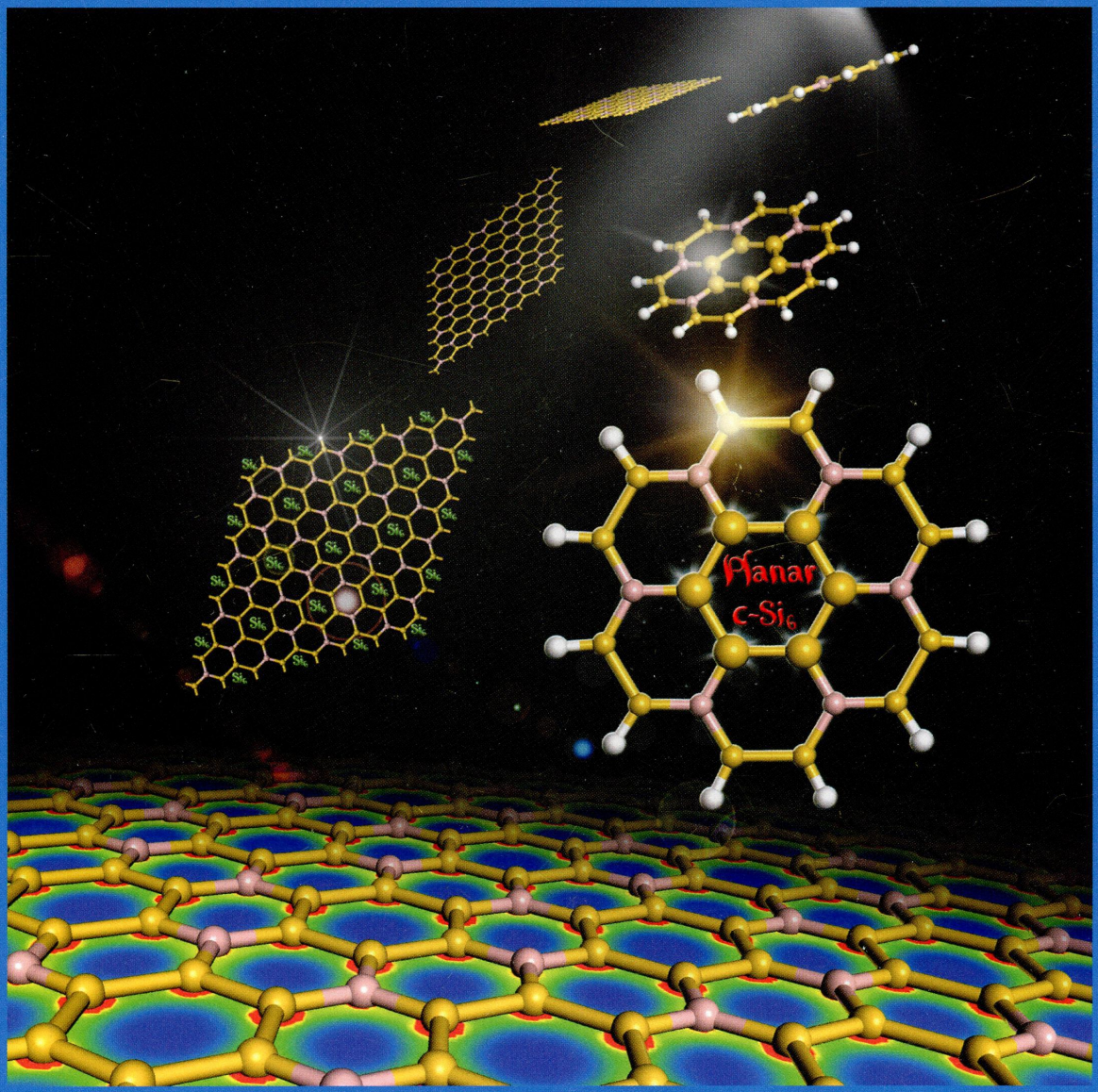

Consequence of π-p Conjugation: Planar D_{6h} c-Si_6 Rings and Metallic BSi_3 Silicene
(see pages 25825 and 25836)

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ON THE COVER: Consequence of π-p conjugation: planar D_{6h} c-Si_6 rings and metallic BSi_3 silicene. The silicon analogs with planar aromatic D_{6h} cyclic six-membered silicon ring (c-Si_6), such as hexasilabenzene and planar graphene-like structure of silicon, have been intriguing chemists but remain elusive. Here, by means of DFT computations, Chen and coworkers show that the strong π-p conjugation between c-Si_6 and B atoms not only flattens the Si_6 rings but also results in the metallicity of c-BSi_3 silicene and its one-dimensional derivatives (nanotubes and nanoribbons). See page 25825 (*J. Phys. Chem. C*, DOI: 10.1021/jp507011p). The metallic BSi_3 silicene is predicted to be a promising high-capacity anode material for lithium-ion batteries. See page 25836 (*J. Phys. Chem. C*, DOI: 10.1021/jp503597n).

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