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Ab Initio **Computational Studies of the Electronic and Optical Properties of SiC Nanotubes** GUANG-YU GUO, I-JEN WU, Department of Physics, National Taiwan University, Taipei 106, Taiwan — Since the discovery of carbon nanotubes (CNTs) in 1991 by Iijima, carbon and other nanotubes have attracted considerable interest worldwide because of their unusual properties and also great potentials for technological applications. Though CNTs continue to attract great interest, other nanotubes such as BN nanotubes (BN-NTs) may offer different opportunities that CNTs cannot provide. We have carried out systematic computational studies of various physical properties of SiC nanotubes. In this talk, we will present ab initio calculations of electronic, linear and nonlinear optical properties of SiC nanotubes [1].
[1] I.J. Wu and G.Y. Guo, Phys. Rev. B **76**, 035343 (2007).

Guang-Yu Guo
Department of Physics, National Taiwan University, Taipei 106, Taiwan

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