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Electronic structures of MoS2 nanotubes. LINGYUN XU, MURRAY DAW, XING GAO, ERDI BLEDA, Clemson University — The electronic structure of MoS2 nanotubes has been studied using first principles. We investigated MoS2 zigzag (n, 0) nanotubes as well as armchair (n, n) structure. We constructed MoS2 nanotube with ABA and ABC stacking. The structures have been completely optimized. We compare to previous tight-binding calculations by Seifert et al.(Phys. Rev. Lett. 85, 146 (2000)).

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