



Professor Guoxin Cao

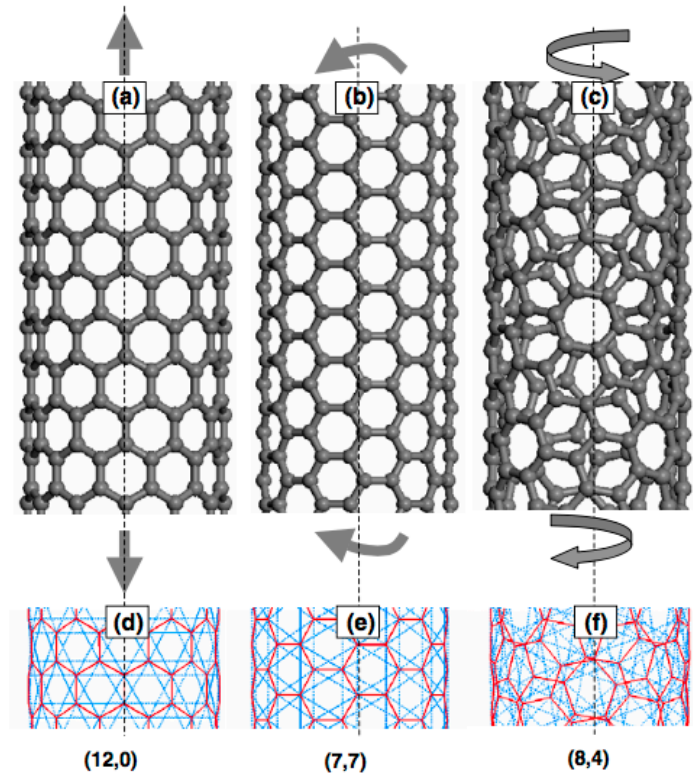


Figure 2. Atomic configurations associated with (a) (12, 0) zigzag SWCNT, (b) (7, 7) armchair SWCNT, (c) (8, 4) general chirality SWCNT; and space-frame model for (d) (12, 0), (e) (7, 7) and (f) (8, 4) SWCNTs. In (d)–(f) the dark solid lines represent primary beams and light dashed lines are secondary beams.

From: Xi Chen and Guoxin Cao, “A structural mechanics study of single-walled carbon nanotubes generalized from atomistic simulation”, *Nanotechnology*, Vol. 17, pp 1004–1015, 2006 (SWCNT in the figure caption above means “Single Wall Carbon Nanotube”)

See:

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https://www.researchgate.net/profile/Guoxin_Cao

College of Aerospace Engineering and Mechanics

Tongji University, China

Formerly:

2010 Dept. of Mechanics and Aerospace Engineering, Peking University, China

2008-2010 Dept. of Engineering Mechanics, University of Nebraska at Lincoln, USA

2005-2008 Dept. of Civil Engineering, Columbia University

Selected Publications:

Cao, G. & Chen, X. (2006a). Mechanisms of Nanoindentation on Single-Walled Carbon Nanotubes: The Effect of Nanotube Length, *Journal of Materials Research*, Vo.21, No. 4, (April 2006), pp.1048-1070, ISSN 0884-2914

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Guoxin Cao, "Atomistic studies of mechanical properties of graphene", Polymers, Vol. 6, pp 2404-2432, 2014