

Applied Physics**Investigators at Clemson University zero in on applied physics**

2008 JUL 28 - (VerticalNews.com) -- "The magnetostatic interactions between carbon nanotubes filled with magnetic particles have been experimentally and theoretically studied," scientists writing in the journal *Applied Physics Letters* report. "By making nanotubes uniformly magnetized, one eliminates the attraction caused by periodicity of nanoparticles in magnetic chains. The discreteness of individual nanoparticles in the nanoneedles is not observed and these nanoneedles interact by their magnetic poles," wrote K.G. Kornev and colleagues, Clemson University. The researchers concluded: "Since the attraction/repulsion events are predictable, the suspensions of magnetic nanotubes are attractive candidates for active elements in changeable diffraction gratings, filters, and polarizers." Kornev and colleagues published their study in *Applied Physics Letters* (Magnetostatic interactions between carbon nanotubes filled with magnetic nanoparticles. *Applied Physics Letters*, 2008;92(23):33117). Additional information can be obtained by contacting K.G. Kornev, Clemson University, School Materials Science & Engineering, 161 Sistine Hall, Clemson, SC 29634, USA. The publisher of the journal *Applied Physics Letters* can be contacted at: American Institute Physics, Circulation & Fulfillment Division, 2 Huntington Quadrangle, Ste. 1 N O 1, Melville, NY 11747-4501, USA. Keywords: Electronics, Emerging Technologies, Magnetic Nanoparticles, Magnetostatic, Nanoneedle, Nanoparticle, Nanotech, Nanotechnology, NanotubePhysics, Clemson University. This article was prepared by Journal of Technology & Science editors from staff and other reports. Copyright 2008, Journal of Technology & Science via VerticalNews.com.

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