

Center for Nanotechnology in Society University of California, Santa Barbara

www.cns.ucsb.edu

WEEKLY CLIPS

March 1-16, 2011

Top Deck

What the nation's (& world's) top papers, news wires and sources have been saying about nanotechnology.

[Nano tool inspired by silk moth antenna could aid Alzheimer's research](#)

ANI

March 1

"The silk moth's antenna has inspired researchers from the University of Michigan to develop a better nanotechnology tool that could help understand a class of neurodegenerative diseases, including Alzheimer's."

[Nanostructured Material Promises to Double Li-ion Battery Capacity](#)

IEEE Spectrum Nanoclast blog

Dexter Johnson

March 2

"Nanosys, the Palo Alto, CA-based nanomaterials company, which has long been touted as the IP King of Nanotech with over 500 patents for nanomaterials, has made an announcement recently about a nanomaterial to improve Li-ion battery capacity."

[Nanotechnology may hold key to averting impending computer bottlenecks](#)

The Record (Canada)

March 4

John Markoff

"Hewlett-Packard researchers have proposed a fundamental rethinking of the modern computer for the coming era of nanoelectronics - a marriage of memory and computing power that could drastically limit the energy used by computers."

['Frozen smoke' to lend robots a soft touch](#)

ABC (Australia)

March 9
Alyssa Danigelis

"Robots can solve puzzles, assist with surgery, and even stand in for caregivers, but ask one to handle potato chips without crushing them and humans still prevail."

[Nanotechnology Could Make Batteries in Mobile Devices Obsolete](#)

IEEE Spectrum Nanoclast blog

March 11

Dexter Johnson

"Beyond making mobile phones and other mobile devices flexible enough to wrap around your wrist, I have been a strong proponent of efforts to improve the battery life of these mobile gadgets."

[Will laser-powered space elevator become a reality soon?](#)

International Business Times

March 13

Balachander Suriyanarayanan

"Could the ambitious project of developing a laser-powered space elevator turn science fiction into reality?"

Scientists say such an elevator could enable inexpensive and complete expansion of society into space. They have been seriously considering space elevators as a far-out space transportation system for the next century, which could make travel to geostationary earth orbit a daily event. Beyond earth, space elevators on the moon and Mars open new economic opportunities and expand humanity's reach ever so slightly into the solar system."

Also noted by [Yahoo News](#).

On Deck

What Local Sources are Reporting

[Nano step in cancer cure](#)

The Daily Lobo

March 1

Zach Gould

"The UNM Cancer Center and Sandia National Laboratories have taken one small step in the fight against cancer - a very, very small step."

[Nanodiamonds as a drug's best friend?](#)

Medill Reports (Northwestern University)

March 9

Chelsea Whyte

"Researchers at Northwestern University are using nanodiamonds - miniscule carbon particles - to treat breast and liver cancer. Successful tests in mice have used the nanoparticles as a drug delivery system, releasing cancer treatment drugs over time and making them more effective."

[Nanotechnology Drives Fuel Cost Savings](#)

WXXI

March 14

Zack Seward

"With oil prices skyrocketing, transportation companies around the country are struggling to cope with higher fuel costs."

Nano Press

What nano-centered publications are reporting

[Bacteria as live cargo shuttles for nanofabrication](#)

Nanowerk

March 1

"Bacterial propulsion systems are intriguing for nanotechnology researchers because nature has already solved most of the problems that they are still struggling with in designing molecular motors and other self-sustained nanoscale actuating systems. Indeed, it has turned out to be very challenging to even move sub-micron scale structures in well directed paths, especially under biologically friendly conditions."

[Microbubbles to Light the Way to Sentinel Lymph Nodes of Breast Cancer Patients](#)

Nanotechwire

March 1

"Researchers at the University of California, San Diego are developing nonsurgical methods for identifying critical lymph nodes to help doctors determine courses of treatment for breast cancer patients."

[Microfluidic, label-free, high-throughput nanoparticle analyzer](#)

Nanowerk

March 7

"Currently, the most common methods for sizing nanoparticles extract data from bulk measurements. These techniques are inherently averaging and so are unable to effectively resolve mixtures of different-sized particles. While individual nanoparticles can be sized using electron microscopy, this approach is time-consuming and of little utility in assembling significant population statistics."

[Researchers use nanotechnology in gene detection to show disposition to certain cancers](#)

Nanowerk
March 11

"Researchers at The University of Texas at Arlington are perfecting a system to detect a gene mutation implicated in 90 percent of pancreatic cancers and often in lung cancer by running tiny amounts of blood over nanomaterials."

Other (science) issues related to nanotechnology

[Nanotechnology could provide future for hair coloring, study](#)

Cosmetics Design.com
Andrew McDougall
March 3

"Scientists are looking into hair-coloring techniques of the future, including nano-sized colorants and substances that stimulate the genes to produce melanin pigment that colors hair, according to a study published in the American Chemical Society Journal."

[Nanoparticle technology reduces friction in engines](#)

The Engineer
March 4

"Dr Guojun Liu, a researcher at Queens University, Canada, has discovered a way to use nanotechnology to reduce friction in automobile engines and machines."

[New instrument keeps an 'eye' on nanoparticles](#)

Eurekalert
March 6
Gail Gallessich

"Precision measurement in the world of nanoparticles has now become a possibility, thanks to scientists at UC Santa Barbara."

[US NNI reauthorization is needed](#)

Environmental Expert.com
Bergeson & Campbell, P.C.
March 5

"On December 28, 2010, the US Reauthorization Act of 2010 (H.R. 5116), entitled 'America Creating Opportunities to Meaningfully Promote Excellence in Technology, Education, and Science (COMPETES)' was presented to President Obama for signature. Importantly for nano stakeholders, the bill, which unanimously passed by the Senate on the 17th December 2010, does not include reauthorization of the National Nanotechnology Initiative (NNI). The House passed similar legislation on May 28, 2010, and that legislation would have reauthorized the NNI."

[Book Makes Nanotech Accessible to Smaller Readers](#)

University of Texas, Dallas

March 7

"Although Dr. Moon Kim's zeal for nanotechnology springs in part from years of research into the structural characterization of advanced electronic materials, he doesn't see why kids shouldn't be exhilarated by the very small as well."

[Nanotechnology for Energy: Structure Your Solar Cells](#)

Materials Views

March 15

Kathrin Wildemann

"What is the ideal morphology of organic and hybrid solar cells? With improving possibilities for the control of material texture on the nanometer scale, nanostructured solar cells have been attracting increasing scientific attention in recent years, in particular, in research on solar cells containing organic semiconductors, where finding the right nano-morphology could be the bottleneck."