

2010 : April 2010 - Fast Breaking Papers : Michael J. Sailor Discusses His Work With Nanoparticles

fast breaking papers - 2010

April 2010



Michael J. Sailor talks with *ScienceWatch.com* and answers a few questions about this month's Fast Breaking Paper in the field of Materials Science.



Photo by Erika Kyte Walsh

Article Title: Biodegradable luminescent porous silicon nanoparticles for in vivo applications

Authors: Park, JH;Gu, L;von Maltzahn, G;Ruoslahti, E;Bhatia, SN;Sailor, MJ

Journal: NAT MATER, Volume: 8, Issue: 4, Page: 331-336, Year: APR 2009

* Univ Calif San Diego, Dept Chem & Biochem, La Jolla, CA 92093 USA.

* Univ Calif San Diego, Dept Chem & Biochem, La Jolla, CA 92093 USA.

(addresses have been truncated.)

SW: Why do you think your paper is highly cited?

It is the first biodegradable fluorescent (quantum dot) nanoparticle to safely image tumors and organs in live mice that could be used for cancer detection and treatment in humans.

SW: Would you summarize the significance of your paper in layman's terms?

It is the first intrinsically luminescent nanoparticle that was purposely designed to minimize toxic side effects. This new design meets a growing need for non-toxic alternatives that have a chance to make it into the clinic to treat human patients.

SW: Where do you see your research leading in the future?

The goal is to use the nanoparticles to chaperone the drug directly to the tumor, to release it into the tumor rather than other parts of the body.

Professor Michael J. Sailor

Department of Chemistry and Biochemistry

Department of Bioengineering

Department of Nanoengineering

University of California, San Diego

La Jolla, CA, USA

- [ScienceWatch Home](#)
- [Inside This Month...](#)
- [Interviews](#)

- [Featured Interviews](#)
- [Author Commentaries](#)
- [Institutional Interviews](#)
- [Journal Interviews](#)
- [Podcasts](#)

- [Analyses](#)

- [Featured Analyses](#)
- [What's Hot In...](#)
- [Special Topics](#)

- [Data & Rankings](#)

- [Sci-Bytes](#)
- [Fast Breaking Papers](#)
- [New Hot Papers](#)
- [Emerging Research Fronts](#)
- [Fast Moving Fronts](#)
- [Corporate Research Fronts](#)
- [Research Front Maps](#)
- [Current Classics](#)
- [Top Topics](#)
- [Rising Stars](#)
- [New Entrants](#)
- [Country Profiles](#)

- [About Science Watch](#)

- [Methodology](#)
- [Archives](#)
- [Contact Us](#)
- [RSS Feeds](#)

KEYWORDS: SEMICONDUCTOR QUANTUM DOTS; MAGNETIC NANOPARTICLES; CARBON NANOTUBES; CELLS;
MICE; NANOCRYSTALS; FABRICATION; CLEARANC.



[back to top](#)

2010 : [April 2010 - Fast Breaking Papers](#) : [Michael J. Sailor Discusses His Work With Nanoparticles](#)