

MSN Home | My MSN | Hotmail | Shopping | Money | People & Chat

Sign In

Web Search:

Go

Time to start investing?
Buy stocks for \$4
 • No inactivity fees • No minimums

Start FREE Trial ▶

shareBUILDER™



MSNBC News

Print | Email | Alerts | Newsletters | Help



TECHNOLOGY & SCIENCE

Science

Tech / Science

- Space News
- Science
- Tech & Gadgets
- Spam/Scams/Viruses
- Games
- New Space Race
- Genetic Genealogy
- Special Reports

News

Business

Sports

Entertainment

Tech / Science

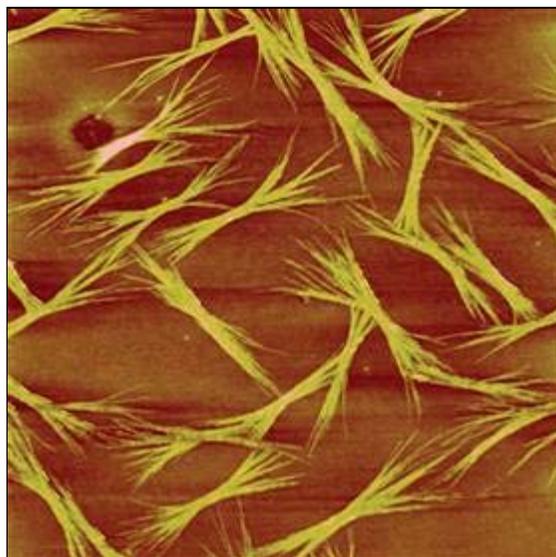
Health

Travel

Multimedia

Opinions

Weather



Guo Laboratory / Purdue University

Scientists build tiny structures out of RNA

Technique could be applied to nanoscale devices

Purdue researcher Peixuan Guo's team has found a way to combine simple RNA shapes into more complex 3-D structures, such as the array show in this photomicrograph. Such arrays might form tiny scaffolding on which to construct nanotech devices.



Updated: 12:54 p.m. ET Aug. 12, 2004

WASHINGTON - The genetic building blocks that form the basis for life may also be used to build the tiny machines of

LIVE VOTE

How long do you

advertisement
Shopping on MS



Mega Science L
\$27.99
JCPenney
More Assorted Science Kits

SPONSORED LINKS

Online Degree Programs and Courses

Canyon College offers c 65 online degrees and hundreds of courses in business, nursing, psychology, alternative medicine, public admin. IT and more! Start your online courses today. www.canyoncollege...

Breyer State

[Local News](#)

[Newsweek](#)

[Today Show](#)

[Nightly News](#)

[Meet the Press](#)

[Dateline NBC](#)

[MSNBC TV](#)

[News Video](#)

[MSNBC Shopping](#)

[Classifieds](#)

[Newsbot](#)

Search MSNBC:



Advanced Search

Advertisement

MSN SHOPPING

Big Books of Summer



Shop

- [Bestsellers](#)
- [Oprah's picks](#)
- [New nonfiction](#)
- [New fiction](#)

nanotechnology, researchers said Thursday.

A team at Purdue University said they had used ribonucleic acid, or RNA, to build microscopic structures such as spirals, triangles, rods and hairpins, that could serve as components of nanotechnology devices.

Nanotechnology is the science of making devices on the scale of nanometers — billionths of a meter. Such nanoscale devices might be used in medicine, or as computers woven into everyday materials such as clothing.

“Biology builds beautiful nanoscale structures, and we’d like to borrow some of them for nanotechnology,” Peixuan Guo, a professor of molecular virology at Purdue, said in a statement.

The work of Guo and colleagues at Purdue’s School of Veterinary Medicine was reported in the August issue of the journal Nano Letters.

RNA is the information carrier for genetic material. While DNA contains the instructions for producing proteins, RNA molecules carry the instructions into the cell’s machinery.

advertisement



think it will take for nanoelectronics to hit the commercial market?

- We're on the edge already.
- Less than two years.
- Two to five years.
- More than five years.

Vote

Vote to see results

University - Earn Degree Online

A leader in innovative curriculums offering online degrees, college certificates and life experience degrees. We believe in and support the philosophy of distance education in a virtual area. www.breyerstate.com

Find Schools that Match Your Goals

Fill out a simple form and free information from multiple schools to help you meet your goals. From online courses to masters and PhD programs we'll match your interests. www.degreeselect.com

Legal Nurse Consultant Certification

Become a certified legal nurse consultant to enhance your nursing career. Register with the Vickie Milazzo CLNC institute. Locations across the U.S.. Financing available. www.legalnurse.com

Advance Your Career Today

Increase your earning potential with an accredited online degree. Enroll at Kaplan College - the trusted name in education. Point, click, go ahead. Choose your field of study. www.KaplanCollege.com

[Get listed here](#)



In their experiment, Guo and his colleagues tried to exploit RNA's ability to assemble itself into shapes.

So far researchers have faced problems trying to manipulate the miniature components needed for nanotechnology, Guo said. "We are short of tiny steam shovels to push them (the components) around. So we need to design and construct materials that can assemble themselves."

RESOURCE GUIDE

- Buy Life Insurance
- expedia.com
- Shopping
- Small Business Tips

Dieter Moll, a researcher in Guo's lab, said the components made with RNA could be useful to industrial and medical specialists, who would appreciate "their ease of engineering and handling."

"Self-assembly means cost-effective," he said.

Copyright 2004 Reuters Limited. All rights reserved. Republication or redistribution of Reuters content is expressly prohibited without the prior written consent of Reuters.



PRINT THIS ARTICLE



EMAIL THIS ARTICLE



MORE FROM SCIENCE

Next →

Science Section Front

- Washington reborn ... virtually
- This time, economic models favor Bush
- Nation's voting machines tested in secret
- Rare twins born to mountain gorillas
- New 'Marathon Mice' outrun rodent peers
- Unearthing the Bible
- Cosmic Log: More melodies for Mars
- Science Section Front

 **TOP MSNBC STORIES**

- Abuse probe faults commanders
- Troops encircle Najaf shrine
- Iraq soccer loses gold chance
- Yemeni charged at Guantanamo
- 1 in 3 have high blood pressure

 **EDITOR'S CHOICE**

- Complete coverage of '04 Olympics
- Italian men urged to leave home
- A trip down the Mighty Miss
- Fighting food allergies
- News quiz: What do you know?

advertisement



Hermit's Haven

\$39.99

Land Hermit Crabs make great pets! They are easy to care for and lots of fun! Watch them come out of their shells to greet you, feed them by hand, have a crab race or give them a bath. Complete kit includes: Sturdy 3.5 gallon acrylic unit with lid, hermi
Toysrus.com

[Cover](#) | [News](#) | [Business](#) | [Sports](#) | [Tech/Science](#) | [Entertainment](#) | [Travel](#) | [Health](#) | [Opinions](#) | [Weather](#) | [Local News](#)
[Newsweek](#) | [Today Show](#) | [Nightly News](#) | [Dateline NBC](#) | [Meet the Press](#) | [MSNBC TV](#)

[About MSNBC.com](#) | [Newsletters](#) | [Search](#) | [Help](#) | [News Tools](#) | [Jobs](#) | [Contact Us](#) | [Terms and Conditions](#) | [Privacy](#)

© 2004 MSNBC.com

Try MSN Internet Software for FREE!

[MSN Home](#) | [My MSN](#) | [Hotmail](#) | [Shopping](#) | [Money](#) | [People & Chat](#) | [Search](#)

[Feedback](#) | [Help](#)

© 2004 Microsoft Corporation. All rights reserved. [Terms of Use](#) [Advertise MSN](#) [Privacy Statement](#) [GetNetWise](#) [Anti-Spam Policy](#)