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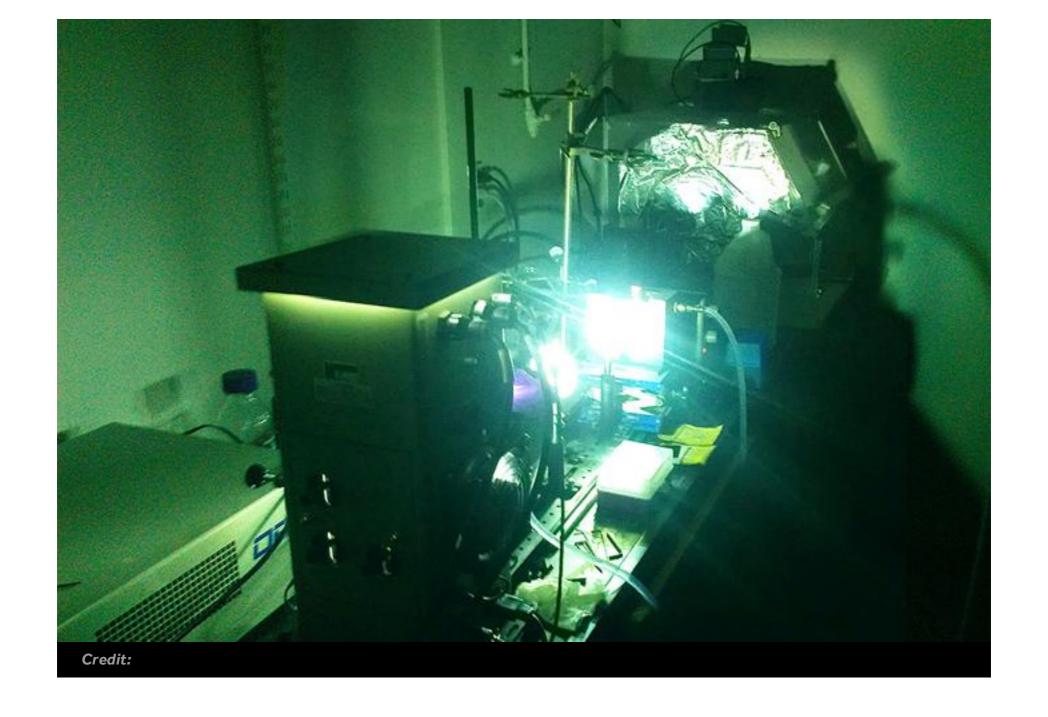


**BUSINESS** 





# MIT, Harvard scientists find way to produce solar power without sunshine



By Matt Rocheleau

#### Boston.com Staff

APRIL 14, 2014 2:32 PM

cientists at MIT and Harvard say they have developed a material that can produce solar power for times when the sun is not shining.

The material absorbs the sun's heat, stores that energy in chemical form and can release it on demand, according to researchers.

"It could change the game, since it makes the sun's energy, in the form of heat, storable and distributable," said a statement from MIT power engineering professor Jeffrey Grossman, one of six researchers who unveiled their findings in an article published this week in the journal *Nature* Chemistry.



The team of scientists said the material would be an inefficient way to produce electricity, but it would work well for heat-related uses. For example, it could be used to heat buildings, for cooking or to power heatbased industrial processes.

And, "Unlike fuels that are burned, this system uses material that can be continually reused. It produces no emissions and nothing gets consumed," said a statement from MIT.

The researchers developed the material after they used computer analysis to devise a concept for it three years ago, officials said.

The study's lead author, Timothy Kucharski, a postdoc at MIT and Harvard, said the team's latest research means commercial production of such a system is now "a big step closer," but further study will be needed to create a practical system.

Harvard professor Daniel Nocera and three others from MIT are working on the study: scientist Nicola Ferralis, assistant mechanical engineering professor Alexie Kolpak, and undergraduate Jennie Zheng.

The project has been backed by BP and the US Department of Energy, officials said.

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# Harvard Prof. Henry Louis Gates Gets Unreal Housing Perks From NYU

Harvard University professor Henry Louis Gates, Jr.'s side gig as a consultant to New York University has apparently won him some enviable New York City housing benefits.

News

🕚 40 min ago

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#### Three Injured in Fitchburg Shooting

Three people were shot at KC's Pub on River Street in Fitchburg after midnight Saturday, NECN reports.

News

All

1 hour ago

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#### Boston Celtics Owners Invest in Skateboard League

There might not be many obvious similarities between high-tech electric car racing and some dude in a hoodie riding a skateboard.

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#### **BDC Now - Weekend Event Picks**

Looking for something to do this weekend? Check out some events that include plenty of wine, a chance to meet some Red Sox players, a burger bash, and more. Watch BDC Weekend with Jenny Johnson.



#### **US Ordered Not to Force Feed Guantanamo Prisoner**

A federal judge in Washington ordered the U.S. military on Friday to at least temporarily stop force-feeding a hunger striking prisoner at the Guantanamo Bay naval base.

News



# **Genetically Modified Foods Confuse Consumers**

Genetically modified foods have been around for years, but most people in the United States have no idea if they are eating them.

Food and dining **Q** 2 hours ago **E** Share

# Vt. Sex Offender Faces Sentencing in Niece's Killing

A convicted sex offender who killed his 12-year-old niece after luring her to his house with a ruse about a pool party is due to be formally sentenced to life without the possibility of parole.

News

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#### Hike with Caution at White Mountains

Campgrounds in New Hampshire's White Mountain National Forest are open, but the Forest Service is warning people that some areas still have snow, and spring melt-off can lead to some slippery footing.

News



#### Will Connecticut Schools Ban Chocolate Milk?

Connecticut lawmakers moved forward this week on a new nutrition bill that could remove chocolate milk from public schools.

Health

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#### Lacrosse Team Honors Fallen Officer and Coach

The girls lacrosse team at Exeter High School is honoring their late coach Stephen Arkell, a New Hampshire police officer who was killed in the line of duty.

News



# **Celebrating 10 Years of Gay Marriage**

On May 17, 2004, Massachusetts offered the first marriage licenses to samesex couples. We asked five couples to talk about what they've learned about themselves and their relationships over the past decade.

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# 10 Parting Shots at SNL Heading Into The Season Finale

Here are "10 Parting Shots at SNL" as the show's 39th season comes to a close Saturday night with Andy Samberg as host.

Obnoxious Boston Fan 3 hours ago Share

# **Environmentalists in Portland Oppose Tar Sands Oil**

Environmentalists will rally at the Deering Oaks Park bandshell in Portland to oppose the Keystone XL oil pipeline and the shipping of tar sands oil through Maine.

News

**Q** 4 hours ago





#### **Broke Beats: F.Stokes – 'Liquor Sto' Diaries'**

Broke Beats is BDCwire's open-source hip-hop column. Every Saturday, we showcase the best new albums, EPs, and mixtapes available for free stream or download. The Midwest has long been a stronghold for spirited rappers and producers who haven't quite pierced the East Coast market. F.Stokes is among the most fearless of of these artists, and the... Read more »

**BDCWire** 



#### **Oprah's Network Postpones Sam Documentary**

The planned documentary by the Oprah Winfrey Network on Michael Sam, the NFL's first openly gay player, has been postponed.

Sports

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# Woman Falls Down Elevator Shaft at Fenway Park

A 22-year-old woman is hospitalized after falling down an elevator shaft at Fenway Park Friday during a Red Sox game, according to the Boston Fire Department.

News



# Obama, Congress Move to Address Veterans Affairs **Firestorm**

The Obama administration and Congress are moving quickly to respond to a growing political firestorm over allegations of treatment delays and falsified records at veterans hospitals nationwide.

Business

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#### Conn. Exhibit Looks at Benedict Arnold as Hero

A new exhibit on display at the Slater Memorial Museum is the latest effort to bring heightened visibility to a subject Norwich has deliberately ignored for centuries.

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# **Testing Inconclusive, Suspected Bobcat Returned**

A judge has returned a 38-pound feline to a New Jersey woman after DNA testing couldn't conclusively say whether it was a purebred bobcat.

News

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#### Clearing This Afternoon with Sunshine for Sunday

Weather Wisdom 0 5 hours ago Share



# Nissan's Taxi of Tomorrow Hoping for a Fare Future

Members of the New England Motor Press Association had the dual experiences of driving and riding in this Taxi of Tomorrow when Nissan brought a pair of the hackney versions of its NV200 van to town.

12 hours ago Share

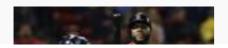


#### Teen's Arm Reattached After Pasta Accident

Four surgries later, 17-year-old Brett Bouchard can move his arm after it was severed below the elbow.

News





Red Sox Fall to Tigers, 1-0, Back Under .500



The loss drops the Sox back below .500, at 20-21, and 10-12 at home.

Extra Bases 12 hours ago 12 hours

# North Reading Man Busted Allegedly Selling Drugs Out of Restaurant

Richard "Ricky" Ward faces a number of drug charges following a six-month investigation by police.

News







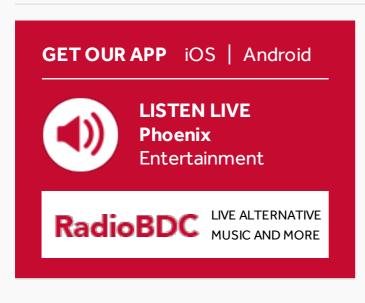
#### Feds Deny Tsarnaev Lawyers' Complaint About Leaks

Federal prosecutors say there's no need for a hearing on what defense attorneys have called leaks and improper comments in the case of Boston Marathon bombing suspect Dzhokhar Tsarnaev.

News

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