



## News & Events

Overview

Lux In the News

Press Releases

Lux Hosted Events

Analyst Speaking Engagements

Ask Lux to Speak at Your Event

### Contact:

**Carole Jacques**

Lux Research, Inc.

617-502-5314

[carole.jacques@luxresearchinc.com](mailto:carole.jacques@luxresearchinc.com)

### Lux Research Releases Top 10 Innovative Companies Profiled in Q3 2012

Potentially disruptive technologies for drug delivery, low-cost solar, cheaper LEDs, novel graphene materials, and efficient grid storage highlight Lux Research's Q3 list

Leading emerging technology research firm Lux Research profiled 370 companies across 15 different [emerging technology domains](#) in the third quarter of 2012 as part of its ongoing Intelligence services. Drawing on the domain expertise of its analysts, Lux Research uses primary research to provide detailed information and critical analysis of firms developing emerging technologies that are poised to impact global megatrends like energy and infrastructure, health and wellness, and materials revolutions.

Each quarter the Lux Research team of analysts identifies the 10 most compelling companies profiled across all its coverage areas. Each firm gets a "Lux Take" that ranges from "Strong Caution" to "Strong Positive," to provide a bottom-line assessment of its prospects, with a "Wait and see" rating for companies that still face too much uncertainty for a definitive call. The top 10 from Q3 2012 are:

1. [Solexel](#) – Wait and See – Solar Components, Solar Systems  
Despite requiring new equipment for cell and module processing, Solexel's epitaxially grown, thin, kerfless, crystalline silicon (x-Si) wafers (35 µm) have a 19% champion cell efficiency with high potential to significantly reduce x-Si cell costs.
2. [Prosonix](#) – Positive – Formulation and Delivery  
As a leader in leveraging ultra-sound waves to manipulate and control crystallization of actives for optimal physico-chemical characteristics, Prosonix is a prime candidate for firms looking for respiratory drug co-development partners.
3. [Dynamax](#) – Positive – Water  
With its sap flow sensors for high-end agriculture monitoring, Dynamax finds applications in wine grapes and at agriculture companies developing new seed varieties. While its products may remain niche, it has found a very profitable, high-value-added market.
4. [XG Sciences](#) – Positive – Advanced Materials  
Despite increasing competition from a handful of new entrants to the graphene space, XG remains the low cost leader and also boasts the most impressive business execution to date via its strategic relationships with Cabot, Hanwha Chemical, and Posco.
5. [Clear Jet](#) - Wait and see – Printed Electronics  
Many companies produce transparent conductive films (for displays, touch screens, and solar panels) using etching, but Clear Jet can directly pattern silver nanoparticle inks using the "coffee ring" effect – the nanoparticles go to the outside of inkjet droplets, forming a series of interlocking rings. While it faces many hurdles in scaling its process, it has the potential to lower costs long term.
6. [Metrolight](#) – Positive – Efficient Building Systems  
As a developer of energy-efficient, networked lighting control systems that enable up to 70% energy savings, Metrolight is well-positioned to serve both the incumbent high-intensity discharge lamp and the emerging LED market for industrial and street lighting applications.
7. [Sweetwater Energy](#) – Wait and see – Alternative Fuels  
In the race to produce cheap cellulosic sugars, Sweetwater Energy is integrating dilute acid pretreatment and enzymatic hydrolysis to tailor sugar streams and reduce inhibitors, with a distributed plant model that targets low cost feedstock.
8. [Bridgelux](#) – Positive – Energy Electronics  
With an extensive partnership network and strong VC backing, Bridgelux is aiming to reduce light-emitting diode (LED) costs by depositing the gallium nitride (GaN) emitter on cheaper silicon substrates. It has a pilot-scale 160 lm/W cool white LED die, and is also the only firm to demonstrate a warm white LED GaN-on-Si die, at 125 lm/W.
9. [Lightlouver](#) – Positive – Sustainable Building Materials  
Lightlouver reduces artificial lighting loads and glare by redirecting daylight to the top of the room via optical slats embedded in a window, playing to the increasing demand for energy-efficient buildings that provide comfortable, naturally-lit environments.

10. [Prudent Energy](#) – Positive – Grid Storage

Prudent is a vertically-integrated, vanadium redox flow battery developer that produces its own membranes, electrolyte, and also secured its own supply of vanadium to realize cost reductions throughout its value chain, allowing it to be the first active flow battery company operating commercially in the energy storage market.

**About Lux Research**

Lux Research provides strategic advice and on-going intelligence for emerging technologies. Leaders in business, finance and government rely on us to help them make informed strategic decisions. Through our unique research approach focused on primary research and our extensive global network, we deliver insight, connections and competitive advantage to our clients. Visit [www.luxresearchinc.com](http://www.luxresearchinc.com) for more information.