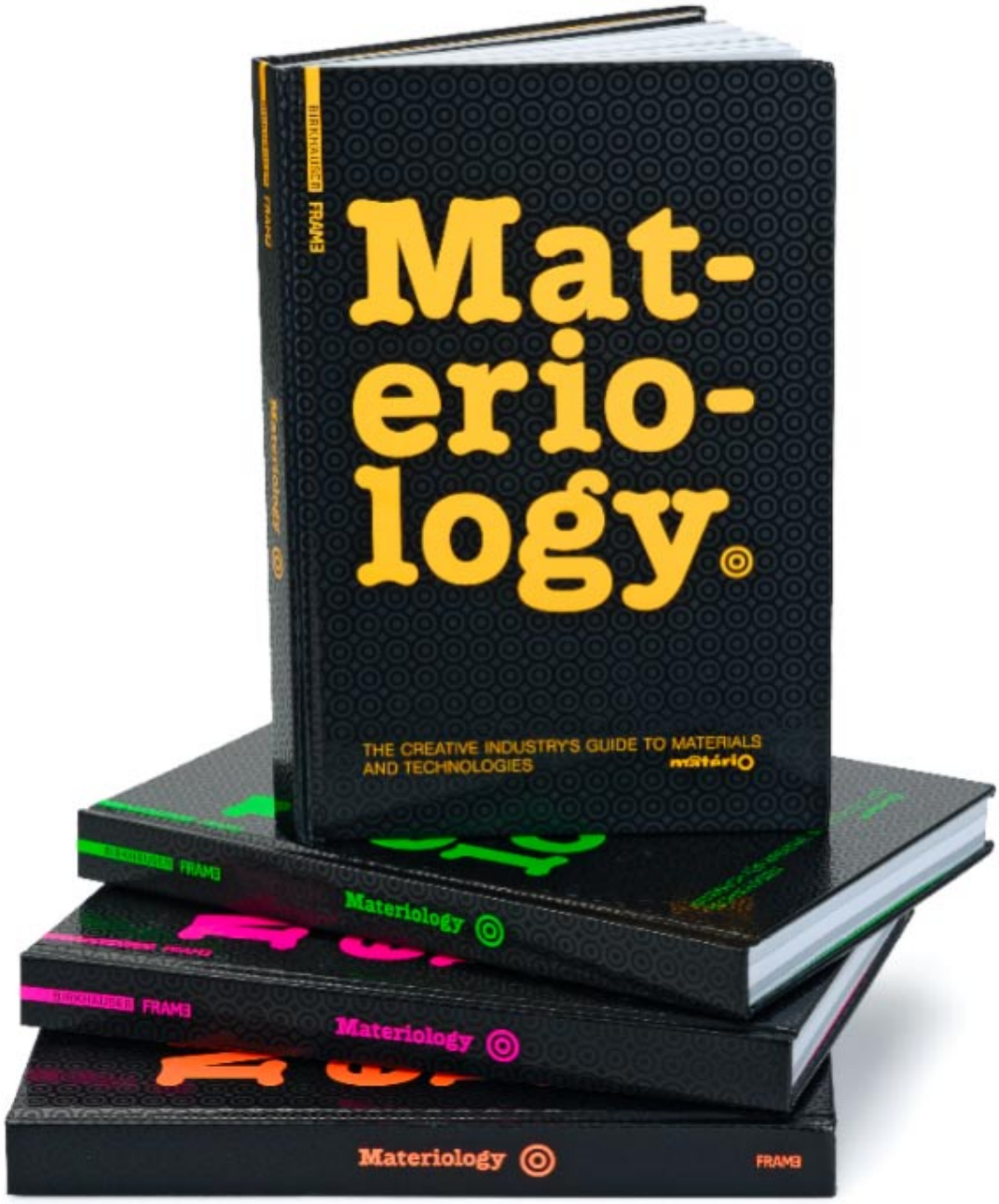
O!

The matériO Letter

#34



DON'T FORGET THE 27TH

Launch of the book MATERIOLOGY
Showroom matériO, btw 5 pm & 9 pm
15, square de Vergennes, Paris 15e

Seen at materio.fr/en

Heckel & Jeckel

This invention comes from NorthWestern University in Illinois, United States of America. We already knew about studies concerning Geckos, a type of lizard that has amazing abilities to «stick» on any kind of surface (matériO R1241) but this time a new sticking material has been found by combining geckos and mussels abilities. The scientist succeeded in creating a surface covered with nano-»teeth» or nano-»peaks» (such has the gecko's legs) and also coated with a polymer imitating the mussel effect. Such a material has therefore an amazing sticking ability, on any kind of surface and even under the water! Inner bandages and sutures could be replaced, for instance. It's also been noticed that the adhesive property only goes down of 2% after 1000 trials.

Spiderman is out, Geckel's in!
Geckel (GECKo + mussEL)!

(source revue Nature)

Long live the mouse...

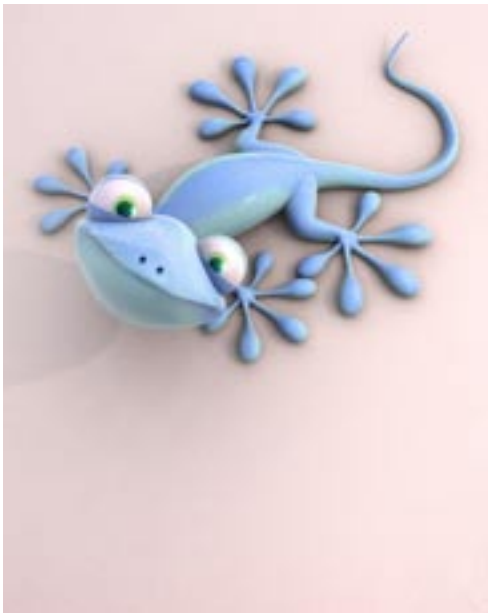
While computer mouses celebrate their 40th anniversary, tactile surfaces, made popular by iPhones, seem to have become the new meeting point between men and machines.

One of the problem encountered with mobile phones is that users fingers are basically too big in relation to screen sizes and therefore important information is missed, explains Kate Green for Technology Review. Obviously, as phone should keep on staying in our pockets, it is quite difficult to make them bigger! That's why Patrick Baudish, researcher for Microsoft and Computer Science teatcher at the Hasso Plattner Institute in Postdam, Germany, came up with the idea of using transparency and the back of our phones to extend the interaction surface. Its project named nanoTouch makes it possible to use the back of your phone to activate functions you see at front...

Source Internet Actu

Chameleon ink

With a simple variation of electrical voltage, this new material, based on opal, takes all rainbow colors. As soon as completed, it is on the market (matériO 00670) and should be available for flat screens or electronic paper. This material is naturally blue and turns red - even infrared - and in between takes all the various colors of a rainbow... only thanks to a variation of voltage between 0 and 2 volts. The color is not the result of a light emission but of a change of the material itself. Such a display does not need backlighting and its contrast is high. Exceptional qualities opening numerous applications to this material, within electronic papers and dynamic displays or any other screen with high contrast and low electric consumption requirements.



selection

Here is the selection of the month.
Being a member, you know by heart what there is for you to do : once entered the database with your own personal access codes, you can directly use the materials references written here or just type «selection34» to get all the 17 references back together.
If you're not a member, well... This selection will maybe make you realise what you're missing and how desperately you need to become one (member)!

F0151

A technology used to transform ceramic parts into perfume diffuser. Want a perfumed ceramic business card? It's now possible!

C0283

Composed of marble powder, these lime plasters are natural, dyed with also natural pigments. A new process mixing lime with metallisation enables surprising effects of metallic textures.

R1367

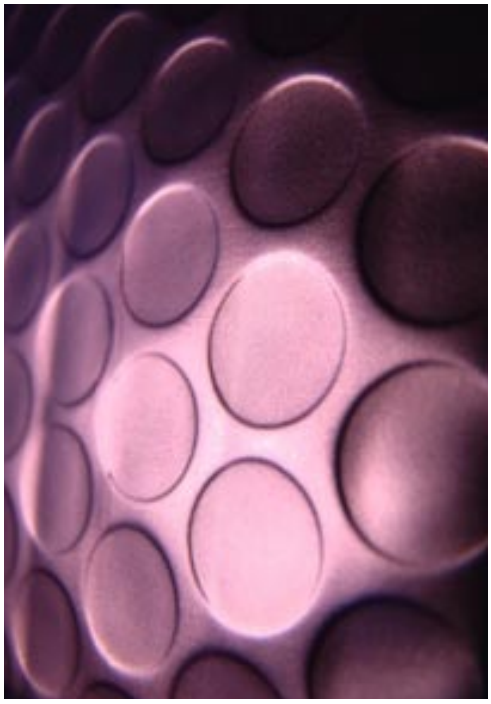
A photoluminescent film available in rolls, to create, for instance, luminous exit signs and which remains visible even after 6 to 8 hours in the dark.

C0379

Just for the pleasure of the eyes : another reference of honeycomb, an ultralight composite panel with an aluminium honeycomb core (medium size cells) and 2 side panels in acrylic. Nice «pixel» effect...

R1437

A gel that basically kills bad smells! It does exist, we swear. The official definition is : chemical neutralization of foul-smelling gases...



R1436

When envelopes become gift wrappings : beautiful, colorful and steel protecting your precious mails. What else would you like?

T0885

A high performance and innovative textile dedicated to biological filtration of waste waters. Mainly used within industrial clarification plants so far.

G0439

Made with optical glass, these lighting bricks use LEDs so that, as soon as night comes, they light up and show the way...

P0228

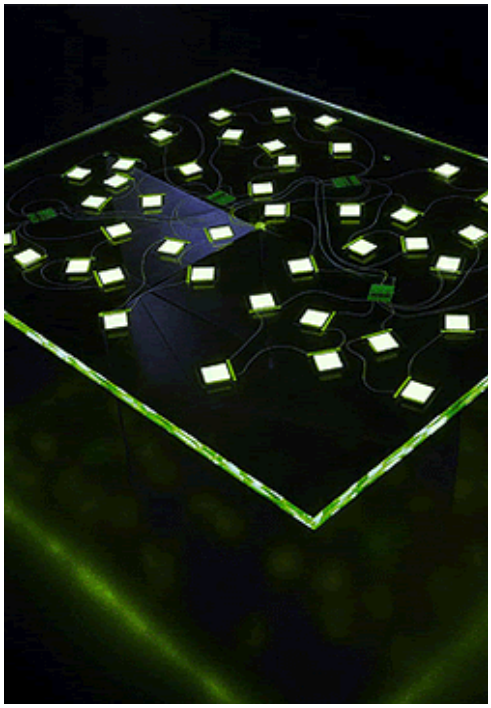
A water soluble paper, cellulose based, 100% biodegradable and safe for the environment. Once introduced into water it will dissolve in less than 30 seconds and will leave no residue behind.

G0482

A photoluminescent mosaïc to create aesthetical effects revealed when it's dark.

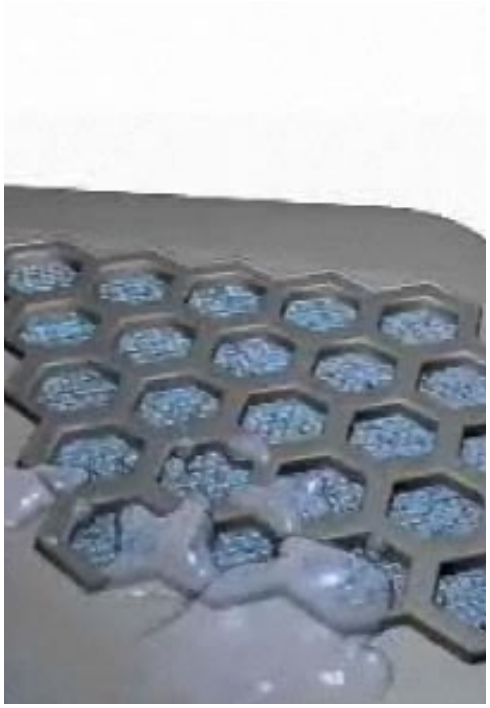
T0894

Natural fibres taken out of an asian type of cypress bark. Anti-bacterial, relaxing and insect-repellant properties... They also smell good! Textiles made with these fibers are nice to touch and innovative.



G0442

A laminated glass with OLED inclusions. Ingo Maurer already played with the technology creating a table but it's up to you now!



R1435

When soft materials - textiles - become smart and offer a ventilation system : letting air go through them or closing themselves, becoming completely waterproof, when necessary!

R1439

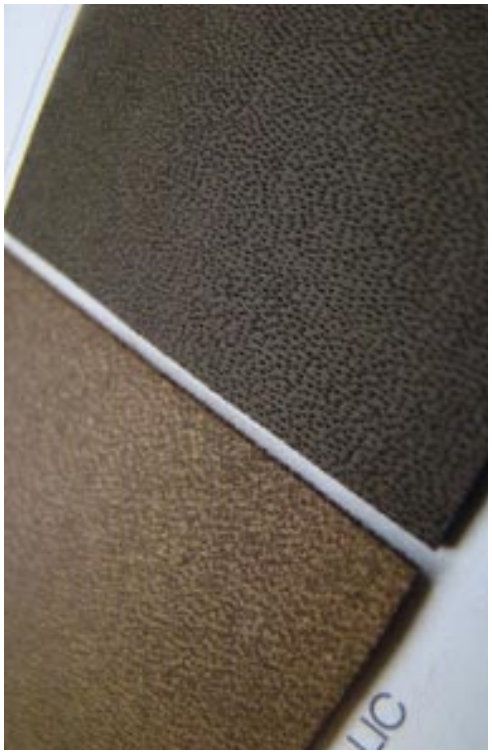
An innovative furniture wall-system created for public spaces where, instead of sitting, an individual can comfortably lean against it for support. Recycled plastic.

T0873

A whole range of products with natural textures combining textiles and cork shavings. Several designs and colors.

00485

Metallic brushes dedicated to industrial uses, which could probably be used other ways as they are incredibly surprising!



00673

A material that is 85% pure leather fibres. It reproduces the look, the touch and the smell of real leather... A true-false leather!

5 000

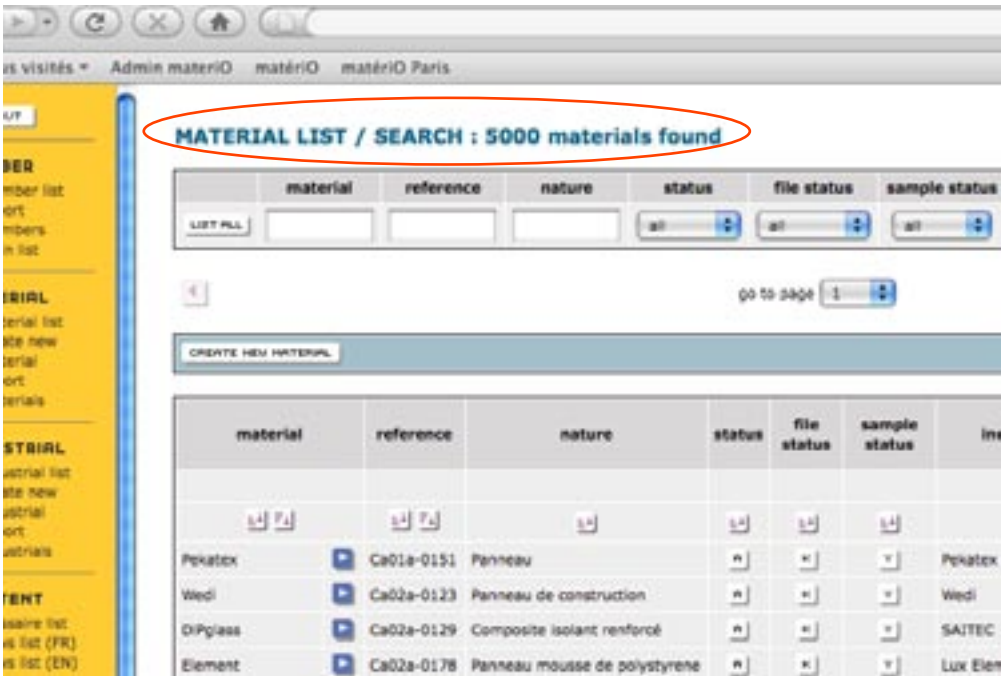
GREENSULATE ™

Probably a sign of the sustainable-responsible time if the 5 000th sample we indexed inside the database is a mushroom!
Thank you very much to Chris Lefteri for he tip! www.chrislefteri.com

Of course, matériO does not rely on figures to make its success and the richness of our database is not completely linked to the number of material ID card that we can claim but still! It actually means that we identified so far 5 000 materials, products and/or processes that are either special, innovative, available and/or unknown enough to be noticed and presented to you...

This is a perfect opportunity for us to remind you what is the purpose of matériO : to identify, to collect and to show you all kinds of materials/semi-products/products/technologies that are specific, innovative, different from regular offers... and chosen among any kind of industrial field (sometimes even made by craftsmen). The idea behind that? Push technology transfers.

What are our selection criteria? Well, basically, if the answer to the following questions is no, it means there is something there for us : «is it really easy to find this material?» « Can I quickly find a manufacturer for this type of product?» «Is there a lot of different manufacturers for such a material?»



lesson

DURALEX ®

I'm 7 years old! What's your age? 39? You're the oldest, you go fetch water!

Maybe just a French thing (you'll tell us) but we used to play with our canteen glasses, Duralex® glasses, on which bottom you could find a proud «Made in France» and a mysterious number... Each time (seems) different! The Duralex® glass is among iconic objects of the 60's-70's. Potbellied, easy to pile up, a simple efficient design invented by Saint Gobain just after the Second World War. One of the many references of a whole tableware collection made out of tempered glass.

But let's remind you what tempered glass is... It's our job, right? A tempered glass is a glass that has nothing special in terms of composition (silica, lime and alkaline oxides.) during which production a violent surface cooling is applied. Cooling it so quickly creates internal tensions between the core and the external surface of the material. A permanent state of stress, a surface compressed and a real improvement in the glass ability to resist to both thermal and physical impacts. When hit by a concentrated impact, a tempered glass will break into lots of smaller safe fragments. Duralex® is therefore an exceptionnaly resistant glass!

And what about this mysterious number at the bottom of the canteen glasses? Well, it was simply the number of the mold with which the glass had been made. 48 molds were available so... you could last very long in dining halls!
Right now, the company Duralex is... dying. First bankrupt in 2005... There may be a buyer... Let's clink glasses to this hope!

LACATON & VASSAL

Winners of the National Architecture Award in 2008

Two architects (but they are not the only ones!) to demonstrate how you can transfer materials and technologies from one area to another and reveal some unsuspected technical properties and/or aesthetical characterictics. No doubt that polycarbonate or industrial structures owe Lacaton & Vassal their new celebrities and the renewal of their reputation, showing off on private houses façades and making life beautiful to those who got the smart idea to commission the bright architectural duo. Reducing their work, by the way, to this ability to «hijack» materials would be a mistake... but is simply symptomatic of our matériO 's eye! We therefore invite you to visit the exhibition dedicated to their work at the brand new Cité de l'architecture et du patrimoine so that you can have a glimpse of their complete projects.
As said : «Freedom is a fundamental element in their work: freeing up spaces, varying volumes, adopting a transformation strategy and retaining the possibility to radically change the way in which buildings are used.» Sounds attractive, don't you think?

Exhibition till 15th of March 2009
Cité de l'architecture & du patrimoine
Palais de Chaillot
1 place du Trocadéro
Paris 16ème
France
www.citechaillot.fr

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DAMIÁN ORTEGA

CHAMP DE VISION

Thank you, Mr Saco, for the tip... You will probably go visit Ron Arad exhibition in Beaubourg, in Paris... If you are there or come to France but, by doing so, do not miss the next exhibition room where a colored and smart installation of Damiàn Ortega can be seen.
«Along with Abraham Cruz-Villegas and Gabriel Kuri, he is one of the most prominent artists of the new Mexican generation. He first came to wider attention with his Cosmic Thing at the 50th Venice Biennale in 2003, consisting of a Volkswagen beetle dismantled and suspended from the ceiling, an ironic deconstruction of a cult object of Mexico's consumer society.»
If you enter the room, please walk to the back of it and do not forget to place your eye in front of the hole...

www.centrepompidou.fr