

A new era for track etching technologies

December 14 2005

A new spin-off of Université Catholique de Louvain is using second generation track etched technology and sees very wide applications such as circulator, (bio)sensors, lab on a chip, high throughput screening, microwaves filters or just simply high-tec separation.

it4ip is the nucleus of a new spin out from the Université catholique de Louvain (Belgium) dedicated to the development and production of unique templates based on energetic ion track technology.

it4ip technology is used to track and etch polymers as a film or as a thin layer deposited on a support. Track etched sheets are made of polycarbonate, polyimide or PET, while thin layers of these polymers can be track-etched after deposition on a substrate such as glass, quartz or silicon. Using the specific features of this technology, pore size and pore density are controlled over wide ranges.

A variety of materials (metals, semiconductors, oxydes, heterostructures) can be deposited into the pores as nanowires or nanotubes; these structures can be produced with over wide range of aspect ratios with excellent shape control, and can be either used in-situ or easily harvested by simple chemical dissolution.

it4ip technology is also able to confine nanopores and hence nano-objects into zones as small as 1 micron square (patterning process) and so create a nano multiwell plate.

Link: [it4ip](#)

Source: Université Catholique Louvain

Citation: A new era for track etching technologies (2005, December 14) retrieved 19 April 2024 from <https://phys.org/news/2005-12-era-track-etching-technologies.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.