

# A method of selectively laser patterning thin layers to form flexible implantable devices

Patterning method for manufacturing implantable thin film devices.

**Applications:** Implantable devices for stimulation



| Features                           | Benefits                                                                                                                                                                                                                    |
|------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1-2 $\mu$ m precision              | Allows for patterning of very thin layers without damage caused adjacent layers. For example, removal of resistant polymer materials from on top of more susceptible thin metal films, or creation of microfluidic channels |
| Fabrication out of 2D plane        | So curved surfaces or 3D structures can be patterned                                                                                                                                                                        |
| No requirement for toxic chemicals | Making the process less hazardous for the operator and better for the environment                                                                                                                                           |
| Rapid processing                   | Easy to implement design changes and prototype multiple versions that previous would have required separately manufactured masks                                                                                            |

## **Awaiting patent and Available for**

- Co-development
- Consulting
- Licensing

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To find out more, contact [enquiries@innovation.ox.ac.uk](mailto:enquiries@innovation.ox.ac.uk) and quote the project number.

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