Device and Process for Imaging Through Blood

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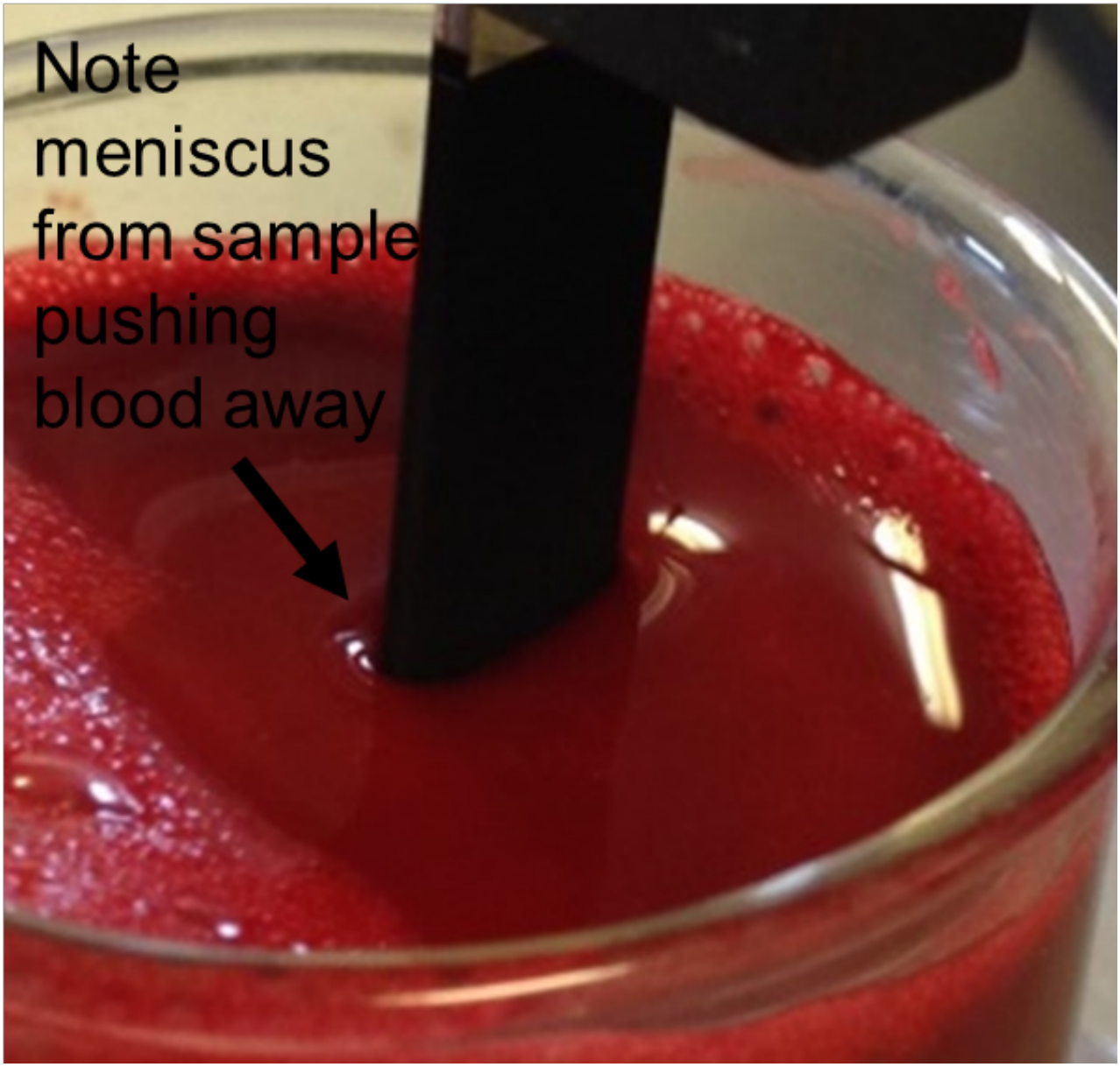
Technology description

A method for permanently modifying a surface to make an object repel blood and other liquids. The technology can be used to modify the surface of laparoscopic equipment to improve in vivo imaging capabilities.

Technology Description

This technology is a method for modifying a surface with microstructures and/or nanostructures to make it repel blood and other liquids. When applied to laparoscopic equipment, this method allows for greatly improved in vivo imaging capabilities. The surface modification can be performed using femtosecond laser patterning of the native surface, thereby avoiding complexities associated with adding a coating of a new material to a medical device.



Inventive Feature(s)

- Blood repelling surface
- Femtosecond laser processing
- Uses native device material instead of adding coatings

Publication(s)

Related publications

About NUtech Ventures

NUtech Ventures is the non-profit technology commercialization affiliate of the University of Nebraska—Lincoln. Our mission is to facilitate the commercialization and practical use of innovations generated through the research activities at the University of Nebraska.

Application area

- Biomedical devices
- Surgical equipment
- Power lines
- Marine
- Aerospace
- Filtration systems

Advantages

- Improved in vivo imaging capabilities
- Prevents contamination
- Convenient cleaning
- Coating permanently applied to surface

Institution

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