

Interferometric phase microscopy for label-free morphological evaluation of sperm cells (Ramot)

code: 5-2014-805

[Natan Tzvi SHAKED](#), T.A.U Tel Aviv University, Engineering, Bio-Medical Engineering

Portable, compact, add-on Interferometric Phase Microscope module

An optical module and software package which optically compresses several interferometric images into a single camera image and thus provides extended interferometric the field of view (FOV). Records more interferometric information on the same amount of camera pixels.

Applications

Medical industry

In-vitro diagnostics -Measuring quantitative thickness profiles of biological cells without any labeling and nondestructive quality testing.

Electronics industry

Real-Time, Rapid profiling during or after lithography processes, and for efficient inspection of electric circuits during or after fabrication.

Advantages

Quantitative, Subnanometric, Optical Thickness Imaging


- High throughput. Thousands of frames per second in wide field (no scanning)
- Non-contact manner
- Label-free (no sample preparation is needed)
- Minimal level of noise.
- Ambient conditions (good for live samples)

Real-Time, Non-Labeled, Quantitative, 3D Sperm Morphology profile

- Head, Neck and Tail morphology
- Cell Motion and Speed
- Cell Vitality
- Tail Spinning direction

Watch video: <https://www.youtube.com/watch?v=dzIqIRhz3a4>

Contact for more information:

Noam Greenspoon ,

Ramot at Tel Aviv University Ltd. P.O. Box 39296, Tel Aviv 61392 ISRAEL

Phone: +972-3-6406608

Fax: +972-3-6406675